

West Rutland School

Safe Routes to School Travel Plan

July 2012



Prepared with assistance from the VT SRTS Resource Center

SafeRoutesVT.org

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INTRODUCTION

This Travel Plan represents the work of the West Rutland School Safe Routes to School (SRTS) Team. Our school is a Silver Level Partner with the Vermont Safe Routes to School Resource Center. We believe creating and maintaining this Travel Plan is a good way to ensure an on-going Safe Routes to School program at our school.

A SRTS team consisting of parents, teachers, and other community stakeholders provided input, guidance, and oversight in writing our plan.



The ideas and recommendations developed during this process will guide us in creating a well-balanced approach to building our SRTS program at West Rutland School. Our school team will use this document as a resource to plan our encouragement, education, enforcement, and evaluation efforts with assistance from the VT SRTS Resource Center.

The Vermont Agency of Transportation (VTrans), through the Vermont SRTS Resource Center, has provided technical assistance in producing this plan. With the help of the Resource Center, we have identified infrastructure improvements that would have a positive impact on

The Five E's

SRTS combines many different approaches to make it safer for children to walk and bicycle to school and to increase the number of children doing so.

Engineering strategies create safer environments for walking and bicycling to school through improvements to the infrastructure surrounding schools. These improvements focus on reducing motor vehicle speeds and conflicts with pedestrians and bicyclists, and establishing safer and fully accessible crossings, walkways, trails and bikeways.

Education programs target children, parents, caregivers and neighbors, teaching how to walk and bicycle safely and informing drivers on how to drive more safely around pedestrians and bicyclists. Education programs can also incorporate health and environment messages.

Enforcement strategies increase the safety of children bicycling and walking to school by helping to change unsafe behaviors of drivers, as well as pedestrians and bicyclists. A community approach to enforcement involves students, parents or caregivers, school personnel, crossing guards and law enforcement officers.

Encouragement activities promote walking and bicycling to school to children, parents and community members. Events such as Walk to School Day, contests such as a Frequent Walker/Bicyclist challenge, or on-going programs such as a Walking School Bus or Bicycle Train can promote and encourage walking and bicycling as a popular way to get to school.

Evaluation is an important component of SRTS programs that can be incorporated into each of the other E's. Collecting information before and after program activities or projects are implemented allow communities to track progress and outcomes, and provide information to guide program development.

- Excerpted from "Safe Routes to School: A Transportation Legacy", the report of the National Safe Routes to School Task Force

walking and biking to school. These infrastructure recommendations are considered planning level and will require further engineering analysis to determine feasibility. It is our hope that our recommendations can be the basis for grants and/or improvements initiated by the Town of West Rutland.

Members of the West Rutland School Travel Plan Team	
Joe Harrington Assistant Principal	Jaime Lee RRPC Planner
Sgt. J.J. Bixby School Resource Officer	Denis Lincoln RRPC
Mary Ann Goulette Town Manager	Beth Moser Crossing Guard
Timothy Applebee Parent	Trish Pelkey Parent
Bryony North Parent	Elmer Jones Head Custodian
Blake Cushing Parent/State Trooper	Margaret Dulli VDH School District Liaison

TEAM VISION

The SRTS program at West Rutland School aligns with the community's efforts towards promoting walkability. The SRTS program goals of combining engineering, education, enforcement, evaluation, and encouragement strategies (also known as the Five E's) to improve the safety and health of students who walk to school fit our school's and town's values perfectly.

Our vision for West Rutland School (and the surrounding neighborhoods) is:

- To be a place where students are excited about biking and walking to school
- To be a place where students and their families feel safe and comfortable biking and walking in the neighborhood at all times
- To be a place where people value and respect their neighborhood
- To be a place where the community has a high level of comfort with biking and walking and is free from the threats of uncontrolled dogs and criminal activity

This Travel Plan outlines our school's intentions for making walking to and from school more sustainable and safer for students and the community. The student tally conducted in February 2012 discovered at least 50 students were already walking to school. Through our SRTS program and efforts, we hope to reach a rate of 88 (20%) of our students walking or biking to school at least two days a week for year one, and at least 158 (36%) students walking or biking to school in year five. We believe this goal is attainable, as 200 (60%) of our students live within 1 mile of school.

ABOUT THIS PLAN

Our school team met three times with the VT SRTS Resource Center to develop this SRTS Travel Plan and once more on our own to adopt the plan. Each meeting provided education on the benefits of SRTS and highlighted successful program components and strategies. The "engineering meeting" included a guided walk audit of the areas around our school. We also discussed education, encouragement, enforcement, and evaluation strategies, which helped to identify needed and complimentary programs to support proposed engineering strategies.

Meeting Date	Content and Outcomes
January 2012	Kick-off Meeting: How the VT SRTS Travel Plan Works <ul style="list-style-type: none"> - Award of the planning assistance grant - Overview of the planning process
February 2012	Engineering Meeting <ul style="list-style-type: none"> - Team visioning - Opportunity and barrier discussions - Walk audit - Observed arrival and dismissal
March 2012	Plan Review <ul style="list-style-type: none"> - Reviewed the draft plan - Identified roles and immediate steps for non-engineering recommendations
May 2012	Plan Adoption <ul style="list-style-type: none"> - Adopted Plan - Began implementation of non-infrastructure recommendations

TRAVEL PLAN CONTEXT

WEST RUTLAND SCHOOL AND WEST RUTLAND OVERVIEW

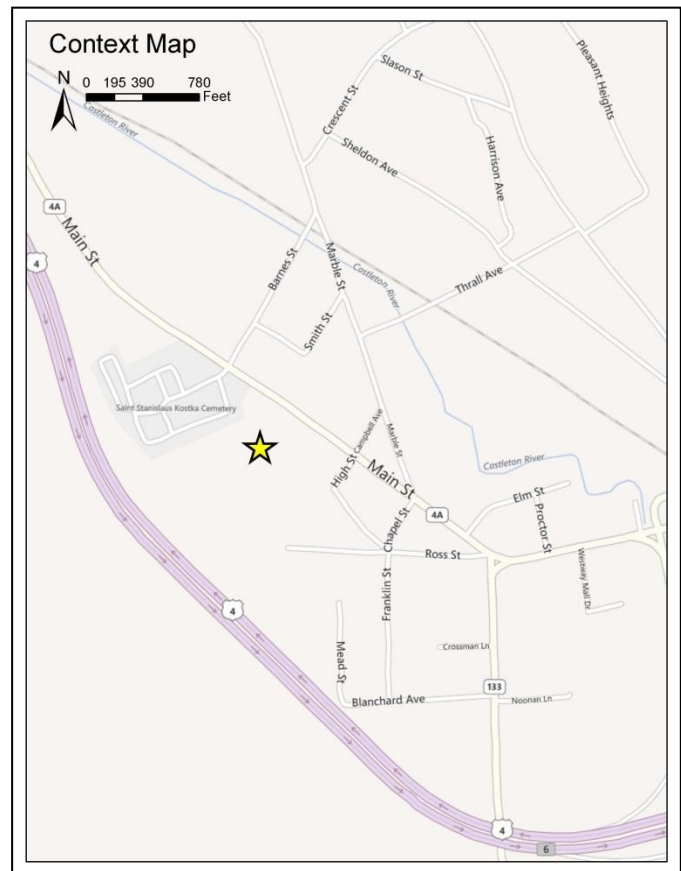
West Rutland School is located in West Rutland, VT, a small rural community in south central Vermont five miles from Rutland, Vermont's third largest city. The history of West Rutland became closely tied to the marble industry during the 1800s and quarrying for marble contributed to the development and growth of West Rutland. The town, which has many natural assets, is mostly a residential community with a small portion of land dedicated to commercial purposes.

West Rutland School is located on Main Street/Route 4A, which is a gateway road traveling east and west into downtown West Rutland. Main Street/Route 4A merges with Route 4, the major state highway running east-west in south central Vermont.

Nearly all traffic into town passes by the school. Main Street/Route 4A is classified as a Class 1 roadway with a school zone from Barnes Street to Marble Street. The speed limit is 25 mph within the school zone and 35 mph outside the school zone. Despite being located on a busy street, the areas surrounding the school consist of low-density residential neighborhoods. All of the local roads have access to Main Street/Route 4A. This direct access to the main road makes it easy for students to determine convenient walking and biking routes and presents opportunities to increase walking and biking.

The SRTS program at West Rutland School is a key component of the school's interest to improve the health of its students.

The West Rutland 2009 Town Plan recognizes that creating pedestrian and bicycle facilities is important for a balanced and sustainable transportation network. The plan seeks to provide a safe and efficient transportation system for all users.



The star on the map represents West Rutland School.

Vermont recently passed Complete Streets legislation which took effect July 1, 2011. Complete Streets policies ensure that state and local transportation agencies consider all users in the design and operation of the right-of-way to make roads safer and more accessible for all users regardless of age or ability. Complete Streets policies working in tandem with the SRTS travel plan will continue West Rutland's walkable, bikeable, and sustainable approach to transportation.

CURRENT SCHOOL DEMOGRAPHICS

Our school has a total of 335 students enrolled for the 2011-2012 school year. Our school serves grades K-12. Students outside one mile of the West Rutland School are eligible for bus transportation.

Demographic	Count	Percentage of student body
Free/Reduced Lunch	157	47%
Students with Disabilities	54	16%
Students with Limited English Proficiency	0	0
Distance From School		
Students living within 1/4 mile of school	73	22%
Students living within 1/2 mile of school	137	41%
Students living within 1 mile of school	200	60%
Students living within 2 mile s of school	279	83%
Students in grades K-4	132	30%
Students in grades 5-8	113	26%
Students in grades 9-12	195	44%

CURRENT STUDENT TRAVEL MODES

Travel Mode	Walk	Bike	School Bus	Family Vehicle	Carpool	Public Transit	Other
Percentage of Student Body (AM)	15%	0.9%	18%	59%	5%	0%	3%
Percentage of Student Body (PM)	19%	0.9%	18%	54%	4%	0%	4%

Data based on SRTS Student Tallies administered in February 2012

SCHOOL ARRIVAL AND DISMISSAL PROCEDURES

The West Rutland School relies on policies, practices, and support activities to ensure a safe and orderly process for students, regardless of how they travel to school. Parents are reminded of these procedures in the student handbook and information sent home to parents before school starts in the fall.

West Rutland School has one driveway from Main Street/Route 4A that all family vehicles use for student drop-off and pick-up. In the morning, parents are permitted to use the one-way driveway, accessing the school entrance to park and walk with their children into the building. Once students have been dropped off, vehicles must exit through the secondary parking lot south east of the school traveling towards High Street.

Personal vehicles can park in the spaces perpendicular to the school driveway



The existing sidewalk on the northwest side of the school entrance driveway allows parents to utilize the parking spaces northeast of the school door to pick up and drop off students.

or in the secondary parking lot southeast of the school entrance and walk with their children into the building. No parking or stopping is permitted in the school driveway.

Students utilizing bus service unload at the bus-only travel lane southwest of the main entrance and then proceed to the entrance via the faculty parking lot area.

Students walking or biking to school must use the main entrance since all other doors to the school are locked.

In the afternoon, buses line up along the bus-only travel lane. Students who ride the bus are released at 2:30 pm and gather along the bus-only travel lane to wait for their bus. Students in grades K-2 waiting for their parents, form a line on the inside hallway at the school main entrance until their parents arrive. Students in grades 2-12 are released at this time.

Students who have received parental permission to walk or bike to and from school are released from the school main entrance simultaneously with school bus riders at 2:30 pm. Staff members are present along the bus-only travel lane and faculty parking lot near the building's main entrance.

Arrival		
Travel Mode	Procedure	Time
Walk	Arrive staggered.	7:30-7:50 AM
Bike	N/A	N/A
School Bus	Arrive staggered.	7:30- 7:50 AM
Family Vehicle	Arrive staggered. Unload at the main entrance.	7:30-7:50 AM
Dismissal		
Travel Mode	Procedure	Time
Walk	Walkers exit with bus riders from the main entrance.	2:30 PM
Bike	N/A	N/A
School Bus	Bus riders exit with bus riders from the main entrance.	2:30 PM
Family Vehicle	Grade K-2 students form a line inside the school hallway and wait for their parents. Grade 2-12 students are released from the main entrance of school.	2:30 PM

EXISTING TRAVEL HABITS

Students travel from all directions to West Rutland School. Many live within a reasonable walking distance of the school. For example, more than one out of every two students (60%) lives within one mile of school and roughly one in four lives within a half-mile.

On February 16, 2012, (the day of our safety audit) we observed more than 50 students walking to school and no students bicycling to school.



Main Street/Route 4A is currently a walking route for students.

Students who walk to school are concentrated on the following roadway segments:

- Main Street/Route 4A — Almost all student walkers east and west of West Rutland School use Main Street/Route 4A to access the school. There is a crossing guard located on Main Street/Route 4A and the school driveway intersection. The sidewalks on both sides of Main Street/Route 4A are used by the students walking to school.
- High Street from the secondary school parking lot exit to Ross Street — Walkers south of the school and east of Main Street/Route 4A use this segment to access the school. A sidewalk is present only on the west side.

Parents of students who drive their children to school listed the following reasons for doing so (the factors are listed from most to least influential):

- Distance
- Violence and crime in the area
- Weather or climate
- Speed of traffic along the route
- Safety of intersections and crossings
- Amount of traffic along the route
- Sidewalks or pathways are not present along the entire walking route
- Not enough time in the morning (convenience)

The parent surveys (collected in April of 2012) showed that if some of the conditions listed above were changed, they would reconsider allowing their children to walk to school. Many of the issues in the table above can be addressed with either infrastructure or non-infrastructure strategies (or in some cases both!). We kept these concerns in mind when picking the strategies that we want to accomplish this coming school year, 2012-2013.

KEY ISSUES

The team identified the following barriers when developing this Travel Plan;

Issue: An unorganized travel environment around the school parking lot during both arrival and dismissal; both drivers and pedestrians do not practice safe behavior in the travel environment. Some parents were observed pulling out of the school driveway into the parking lot traveling towards High Street without stopping for students trying to cross during dismissal. Students were observed running into traffic without looking both ways. Students were also observed walking in the parking aisles of the school parking lots.



Unorganized parking conditions near the school main entrance.

Issue: Key intersections along walking routes lack sufficient crosswalk pavement markings and signage is noncompliant with the Manual on Uniform Traffic Control Devices (MUTCD).

Motorists may not be aware of the presence of pedestrians due to the lack of signage or signage that no longer meets the current standards. Similarly, pavement markings are not high visibility.

Issue: Crossing and walking conditions along Main Street/Route 4A are poor for pedestrians.

Crosswalks do exist for students to navigate across Main Street/Route 4A. However, the lack of compliant signage, heavy vehicular traffic at high speeds, and poor sight lines make for unsafe conditions. Motorists appear unaware of school crossings, school zones, and pedestrians.

Issue: The off-road shared-use path terminates at Clarendon Avenue before the school grounds.

The adjacent West Rutland Recreation Center has an existing off-road bike path that makes an on-street connection at Clarendon Avenue south of Route 4A. The on-road connection to the shared-use path terminates before the school. Students do not have a designated connection between the school and the path which makes it difficult to use for crossing the Main Street/Route 4A and Clarendon Avenue intersection.

TRAVEL PLAN RECOMMENDATIONS

This Travel Plan is comprised of several sections detailing activities and programs for our school to implement now as well as projects for us to develop over time with local officials.

Non-Engineering Plan

This Travel Plan identifies best practice education, encouragement, enforcement, and evaluation activities and programs suitable for our school. Information on the advantages of each strategy and resources to help us implement each are included in the **Appendix F**.

16-Month SRTS Activity Calendar

Our team will pursue a smaller subset of items in the non-engineering plan during the next 16 months. We will review our work periodically, adding additional activities that will continue the SRTS program momentum.



The West Rutland School is home to K-12 students.

Engineering Recommendations

With assistance from the Vermont SRTS Resource Center, we have identified short and long-term engineering treatments to make walking and bicycling to school safer for our students.

Snow Removal Toolkit

Inclement weather is a familiar scene in the State of Vermont. Snow, sleet, slush, ice, and rain impact all modes of transportation, and the timely clearance and removal of the elements are essential for the functionality and accessibility of a Safe Routes to School program. A Snow Removal Toolkit can better inform communities about snow removal policies and procedures, and to provide tools to increase compliance and safety. Snow removal recommendations are located in **Appendix H**.

NON-ENGINEERING TRAVEL PLAN

We identified a number of activities and programs to promote walking and biking to school. These activities and programs, while grouped by “The Five E’s”, are dependent upon each other for their individual success. We plan to work on our highest priority programs this year, following up with other programs in successive years. We used the timeframe below to determine when to initiate programs:

Type	Short	Medium	Long
Encouragement, Education, Enforcement, Evaluation	<i>Or, what we plan to do this school year</i>	<i>Or, what we plan to do next school year</i>	<i>Or, what we plan to do starting in two years</i>

EDUCATION STRATEGIES

The education strategies included in our 16-month activity calendar are aimed at providing all students with pedestrian walking skills. Our education activities this year will include:

- Providing travel safety activity booklets to elementary students
- Hosting a bike rodeo
- Introducing Walk Smart/Bike Smart Vermont curriculum
- Using high school population as mentors and educators about bicycle/pedestrian safety
- Sending home the Parents' Guide to Safe Bicycling with 2nd grade students



Safety education is a priority for this Travel Plan.

Other education strategies we will work on after this year are:

- Incorporating Walk Smart/Bike Smart curriculum into PE and Health classes
- Incorporating SRTS information and tips in the school newsletter

ENCOURAGEMENT STRATEGIES

Encouragement strategies included in our 16-month activity calendar will help students and their parents feel more comfortable and confident about walking and bicycling to school.

The West Rutland School dismissal policy releases all students from the same main exit door at 2:30pm. During the dismissal process, walkers and bikers navigate through the highly

trafficked school grounds, students queue for buses to depart at the bus-only travel lane, and personal vehicles arrive at the building's main exit for pick up. The West Rutland School plans to implement an early release policy for students walking and biking to school. An earlier release would provide lead time for students walking and biking so that the grounds will have a chance to be clear before the buses and personal vehicles arrive for afternoon pick-up.

Our encouragement activities this year will include:

- Modifying school dismissal for an earlier release of walkers/bikers (September 2013)
- Participating in VT Walk and Roll to School Day in May
- Participating in International Walk to School Day in October
- Reviving the school bike club
- Establishing park and bike sites (Recreation Center and American Legion parking lots)

Other encouragement strategies we will work on after this year are:

- Working with the Town of West Rutland to create a bike park (like a skateboard park) at the Recreation Center
- Providing incentive items for biking/walking to school
 - Golden Shoe Award
 - Stickers, pencils, and/or punch cards
 - Protect Head at All Times (PHAT) ski/board/bike sticker
- Mapping best walking/biking routes to school and sharing them with parents/students
- Incorporating SRTS into town 5k walk/run/bike event
- Creating a themed day for SRTS, such as, 'Best Dressed Bike', 'Wear your Helmet Day' or 'Be Safe, Be Seen by Wearing Neon Colors Day'
- Considering earlier release for students who wear bike helmets
- Providing helmet order forms to parents

ENFORCEMENT STRATEGIES

Our SRTS enforcement strategies are aimed at both changing the behavior of drivers and making the neighborhood safer and more secure for students walking to and from school.

The Town of West Rutland does not presently have a town police force or sheriff. The town currently contracts with the Rutland County Sheriff's Department who supplies the services with a Deputy seven days a week. Our enforcement activities this year will include:

- Creating informational postcards to stick to vehicle windshields
- Providing helmets to students who do not own them or have access to them

Other enforcement strategies we will work on after this year are:

- Facilitating a safe drivers pledge for parents
- Launching a Community Captains program
- Enforcing bike helmet rules
- Issuing bike licenses to students who follow safe bicycling practices
- Organizing walking school buses and bicycle trains to increase supervision



Enforcement of existing town policies is a priority for this Travel Plan.

EVALUATION STRATEGIES

Evaluation is an important component of our SRTS program. We plan to complete regular in-classroom student tallies, and evaluation tools such as the student tally and parent survey forms provided by National Center for Safe Routes to School (NCSRTS). We first administered these in February of 2012, which provided baseline information on student travel behavior. Subsequent student tallies and parent surveys will help us measure the effectiveness of our SRTS efforts over time.

We will continue to conduct annual walk audits to evaluate the existing walking and biking environment as well as monitor the progress of recommended projects.

Other evaluation strategies we will work on after this year are:

- Administering parent surveys annually to capture opinions of new parents and change in overall parental perceptions

- Collecting student tally data each year to measure progress toward our goals
- Keeping this Travel Plan updated and using it as a tool for increased SRTS activities

Evaluation Tool	Leader	Schedule
Parent Surveys	Sgt. J.J. Bixby	Annually in April
Student Tallies	Sgt. J.J. Bixby	Annually in February
Walk Audits	Sgt. J.J. Bixby	Annually, two weeks before school

ENGINEERING TRAVEL PLAN

Our goal for engineering improvements is to enhance the physical environment along existing walking routes used by students. Engineering improvements generally fall into three categories: providing sidewalks and paths, improving crossings, and infrastructure projects associated with improving the safety and efficiency of school drop-off and pick-up practices. Descriptions of typical engineering recommendations can be found in **Appendix B**.

We recognize that infrastructure improvements can take time to complete and are a collaborative effort between West Rutland School, the Town of West Rutland and potentially the Vermont Agency of Transportation (VTrans) to implement the projects. The following short, medium, and long timeframes are a guide for anticipated project completion, but actual timeframes may vary:

Short term	Within 2 years
Medium term	Within 5 years
Long term	Longer than 5 years

The team prioritized infrastructure improvements as high, medium or low. The factors affecting this ranking include:

- Locations with specific safety concerns

- Locations along existing student walking or bicycling routes, or with a significant number of school family residences
- Locations that are priorities for the school community

Engineering recommendations for specific locations in the vicinity of West Rutland School can be found in **Appendix C**.

CONSIDERATIONS FOR DESIGN AND FUNDING

Design

- All infrastructure recommendations in this plan are considered “planning level” and will require further engineering analysis, design, or public input before implementation.
- Recommended changes to existing traffic patterns (adding a signal, adding a stop sign, changing lane patterns, etc.) will require a study to evaluate the potential impact that the recommendation could have on existing traffic conditions.
- Drainage, existing utilities and ADA compliance will need to be evaluated for all recommendations at the time of design. ADA guidelines recommend particular design features to accommodate persons with disabilities. ADA design considerations for curb ramps, sidewalks and paths, include appropriate slopes, landing areas, surface conditions, and use of detectable warning materials for visually impaired pedestrians, among other design features.
- Right-of-way was not evaluated as a part of this project. Recommendations assume that sufficient right-of-way exists or that a method to gain needed right-of-way will be identified as the project progresses.
- VTrans district office staff will be involved in the planning and design process for any recommendation made on the state system.
- All infrastructure recommendations should comply with federal, state, and local standards including the American Association of State Highway and Transportation Officials’ Policy on Geometric Design of Highways and Streets and the Manual on Uniform Traffic Control Devices (MUTCD).
- Refer to the Vermont Pedestrian and Bicycle Facility Planning and Design Manual for guidelines on pedestrian and bicycle accommodations.

Funding

- A variety of funding sources may be used for the recommendations, including Safe Routes to School. For example, projects requiring right-of-way acquisition or existing utilities relocation will not be eligible with SRTS funds, but may be funded through other sources.

More information on the types of projects eligible for SRTS funding through the VTrans and at http://saferoutes.vermont.gov/getting_started/funding.

Engineering Recommendations for specific locations are located in **Appendix C**.

APPENDICES

- A. Non-infrastructure Strategy Calendar
- B. Typical Infrastructure Recommendations
- C. Location-Specific Engineering Recommendations (Location Key and Recommendations Table)
- D. Rutland Regional Planning Commission Map Figures
- E. Student Travel Tally February 2012/Parent Survey Reports April 2012
- F. Non-Engineering Strategies Resource Guide
- G. Infrastructure Strategies Resource Guide
- H. Snow Removal Toolkit

Appendix A Non-Infrastructure Calendar

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APPENDIX B TYPICAL INFRASTRUCTURE RECOMMENDATIONS

The following infrastructure recommendations are typical treatments used in SRTS projects. These recommendations may or may not be included in this travel plan. The basic information is provided to give an overall understanding and implementation guidance on each treatment.

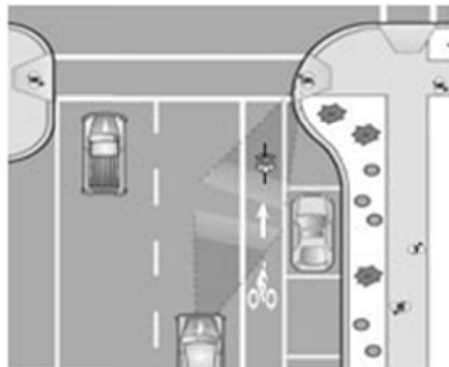


Rectangular Rapid Flashing Beacons:

Rectangular rapid flashing beacons (RRFB), as shown to the left, are warning beacons used to increase visibility of students and all pedestrians as they cross the roadway at uncontrolled crosswalks. This type of signal is pedestrian-activated, i.e., the signal will only flash if a pedestrian has pushed a button, indicating that they need to cross the street. Any proposed RRFB locations need to meet current guidance provided in the interim approval of the MUTCD. For proposed uncontrolled crosswalks on state maintained roads, VTrans approval and justification are needed.

Curb Extensions:

Curb extensions, as shown below, are recommended to reduce pedestrian crossing distances (and thus exposure to traffic) and to slow motor vehicle turning speeds at intersections. Curb extensions located along school bus routes should effectively calm traffic, but not impede buses from making the turn. Design considerations should include the appropriate design vehicle, maintenance concerns, and snow plow accommodations depending on the roadway jurisdiction.



Curb Radius Reductions:

Curb radius reductions are recommended to slow motor vehicle turning speeds and to reduce pedestrian crossing distances (and thus exposure to traffic). Curb radius reductions involve tightening the motor vehicle turning radius at an intersection, as

shown to the left, without extending the curb line into a parking lane. Curb radius reductions located along school bus routes should effectively calm traffic but not impede buses from making the turn. Design considerations for curb radius reductions include the appropriate design vehicle depending on the roadway jurisdiction and ADA compliance.

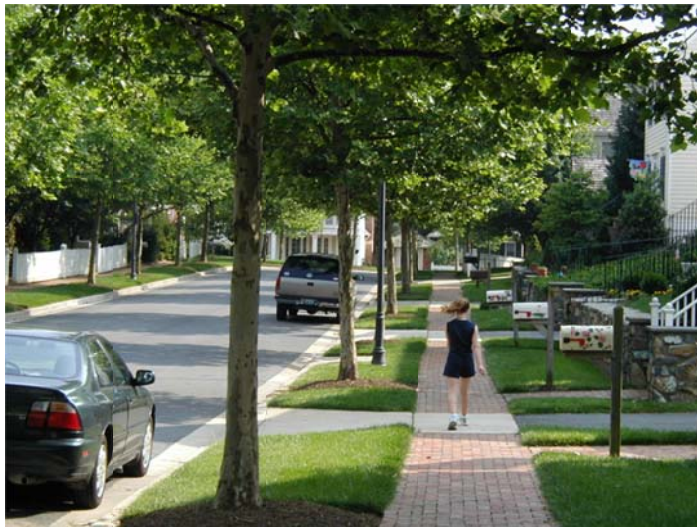
High Visibility Crosswalks:

High visibility crosswalk striping improves the visibility of pedestrians to motorists. Different striping patterns can be used and the most common patterns are variations of the ladder style, shown right. Reflective durable materials should be used to resist decay.



Sidewalks and buffers:

One of our long-term goals is to establish a well-connected sidewalk network throughout the neighborhoods so that families can walk for more of their daily trips, rather than drive. Sidewalks are the most effective when they include a buffer. This buffer increases pedestrian comfort and safety and can also serve as a place for pedestrian “overflow”, especially closer to the school where groups of walkers are largest. Based on Vermont Pedestrian and Bicycle



Facility Planning and Design Manual, the preferred design for sidewalks is a minimum six foot wide sidewalk with a minimum two foot wide buffer for local roadways with curbs. For downtowns and village centers on roadways with curbs, the preferred design for sidewalks is a minimum eight foot wide sidewalk with a minimum four foot wide buffer. For roadways without curbs, the buffer should be a minimum of five feet. Available right of way will impact the ultimate design of the sidewalk.

School Zone Identification:

School pavement markings are recommended to alert motorists that they are entering a school zone where pedestrians may be present both along and crossing the roadway. New pavement markings can work with existing school zone signs to reinforce the message to motorists about the school zone. The detail provided in the figure below is an excerpt of the MUTCD.



Speed Feedback Signs:

Communities may use a mobile “speed trailer” that can be placed in locations where motorists exceed the speed limit often enough that passive enforcement is appropriate. Permanently installed feedback signs, shown right, provide ongoing information to motorists about the speed at which they are traveling. SRTS recommended any potential feedback signs be strategically located at main access points.



For towns interested in reducing the speed limit of a roadway, an engineering study needs to be conducted by the town. Approval from VTrans is needed for state maintained roads.

Pedestrian Refuge Island:

A Pedestrian refuge island, as shown right, may be used to narrow the roadway, reduce motor vehicle speeds, and improve pedestrian crossings. In locations with crosswalks, these islands improve pedestrian safety and access by reducing crossing distances and enable pedestrians to cross roadways in two stages. Pedestrian refuge islands should be used on multi-lane roadways or roadways with insufficient vehicular gaps to pedestrians to safely cross. Prior to design, a gap study should be conducted. Other considerations for pedestrian refuge islands include ADA compliance, maintenance concerns, and snow plow accommodations.



Appendix C: Location-Specific Engineering Recommendations

SRTS engineering strategies create safer environments for walking and bicycling to school through improvements to the infrastructure surrounding schools. These improvements focus on reducing motor vehicle speeds and conflicts with pedestrians and bicyclists, and establishing safer and fully accessible crossings, walkways, trails, and bikeways.

The following table provides a summary of the engineering strategies recommended for West Rutland School. These recommendations were developed by Toole Design Group, LLC based on input from the West Rutland SRTS Team. The table includes an estimate of the amount of time that is likely to be needed to implement the recommended improvements at each site (Estimated Time Frame). The table also indicates the priority of the proposed improvements at each site for the West Rutland SRTS Team (Team Priority).

The engineering recommendations table aligns with the West Rutland School moving forward with reorganizing the pick-up and drop-off location in front of the gymnasium (southwest of the school entrance) as well as implementing an earlier release policy for students walking and biking to school as discussed in this travel plan.

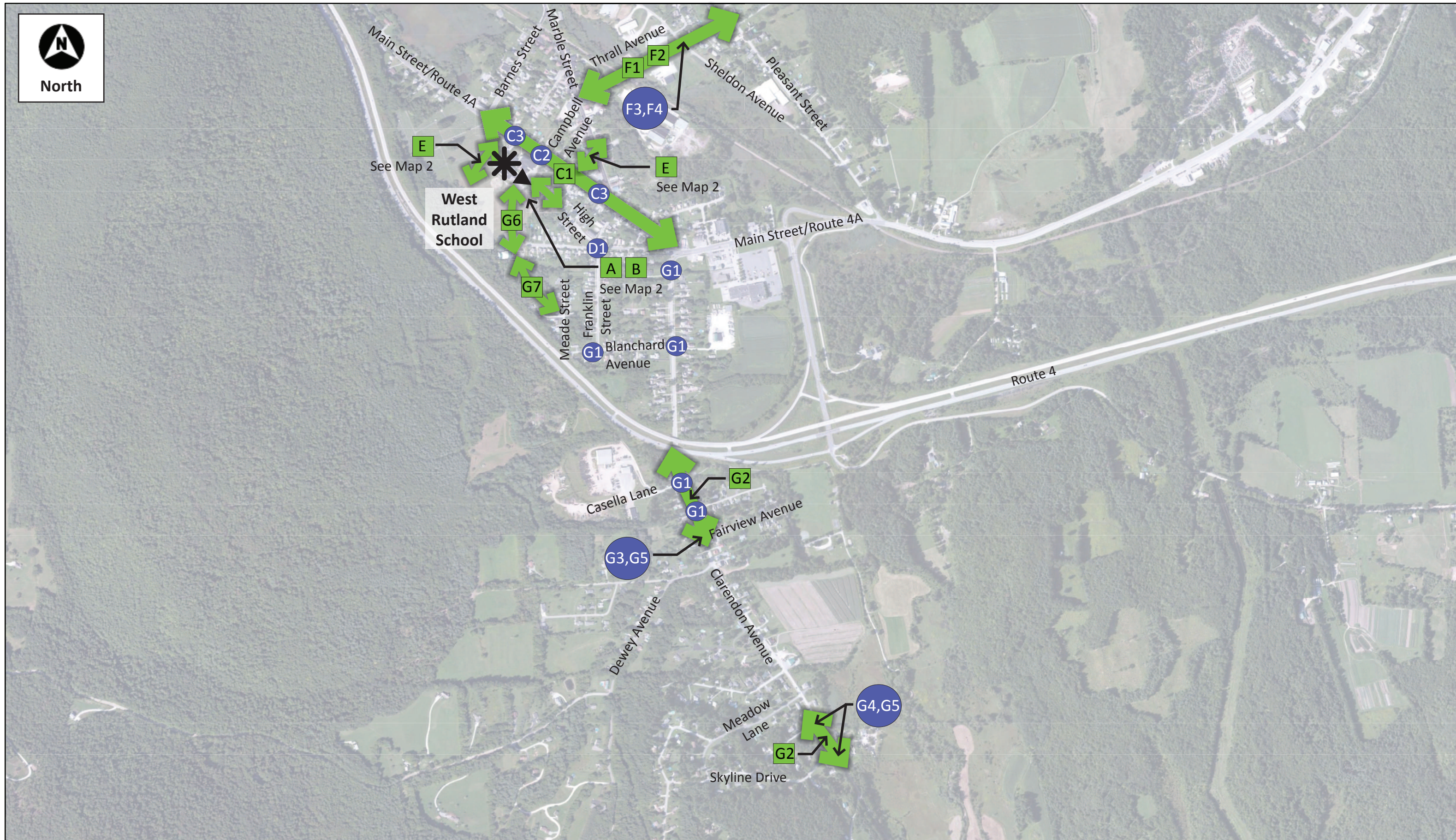
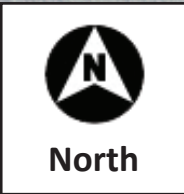
These recommendations are for planning purposes only and may require further engineering analysis, design, or public input before implementation and shall be in full compliance with the Manual on Uniform Traffic Control Devices for Streets and Highways, (MUTCD) Latest Edition adopted by the state.

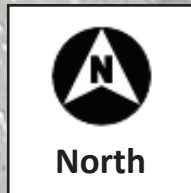
The summary table provided below is followed by information about implementation and a map, which shows where the recommendation sites are located in relation to the school.

Description of Streets with Engineering Recommendations

Street name	Classification of Town Highways	Speed Limit	Curb/No curb & Surface
Barnes Street	Class Three	25	Curb - Paved
Blanchard Avenue	Class Three	25	No curb - Paved
Campbell Avenue	Class Three	25	No curb - Paved
Chapel Street	Class Three	25	Curb - Paved
Clarendon Avenue	Class One	35	Curb - Paved
Fairview Avenue	Class Three	25	No curb - Paved
Franklin Street	Class Three	25	No curb - Paved
High Street	Class Three	25	Curb - Paved south side No curb- Paved north side
Main Street/Route 4	Class One	25/35*	Curb - Paved
Marble Street	Class Two	25	Curb - Paved
Meade Street	Class Three	25	No curb - Paved
Ross Street	Class Three	25	No curb - Paved
Thrall Avenue	Class Three	25	No curb - Paved

*35 MPH north and south of the Town of West Rutland





Sacred Heart
Cemetery

West
Rutland
School

E2,E3

E4
E1

Campbell Avenue

E5

Main Street/Route 4A

Marble Street

High Street

Appendix C: Location-Specific Engineering Recommendations

SRTS engineering strategies create safer environments for walking and bicycling to school through improvements to the infrastructure surrounding schools. These improvements focus on reducing motor vehicle speeds and conflicts with pedestrians and bicyclists, and establishing safer and fully accessible crossings, walkways, trails, and bikeways.

The following table provides a summary of the engineering strategies recommended for West Rutland School. These recommendations were developed by Toole Design Group, LLC based on input from the West Rutland SRTS Team. The table includes an estimate of the amount of time that is likely to be needed to implement the recommended improvements at each site (Estimated Time Frame). The table also indicates the priority of the proposed improvements at each site for the West Rutland SRTS Team (Team Priority).

The engineering recommendations table aligns with the West Rutland School moving forward with reorganizing the pick-up and drop-off location in front of the gymnasium (southwest of the school entrance) as well as implementing an earlier release policy for students walking and biking to school as discussed in this travel plan.

These recommendations are for planning purposes only and may require further engineering analysis, design, or public input before implementation and shall be in full compliance with the Manual on Uniform Traffic Control Devices for Streets and Highways, (MUTCD) Latest Edition adopted by the state.

The summary table provided below is followed by information about implementation and a map, which shows where the recommendation sites are located in relation to the school.

Description of Streets with Engineering Recommendations

Street name	Classification of Town Highways	Speed Limit	Curb/No curb & Surface
Barnes Street	Class Three	25	Curb - Paved
Blanchard Avenue	Class Three	25	No curb - Paved
Campbell Avenue	Class Three	25	No curb - Paved
Chapel Street	Class Three	25	Curb - Paved
Clarendon Avenue	Class One	35	Curb - Paved
Fairview Avenue	Class Three	25	No curb - Paved
Franklin Street	Class Three	25	No curb - Paved
High Street	Class Three	25	Curb - Paved south side No curb- Paved north side
Main Street/Route 4	Class One	25/35*	Curb - Paved
Marble Street	Class Two	25	Curb - Paved
Meade Street	Class Three	25	No curb - Paved
Ross Street	Class Three	25	No curb - Paved
Thrall Avenue	Class Three	25	No curb - Paved
*35 MPH north and south of the Town of West Rutland			

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
<p>A</p> <p>School main entrance and grounds</p> <p>Both buses and parents driving their children use the school drive to drop off students.</p>	<p>The school main entrance travel conditions are an unorganized environment for pedestrians. The school main entrance does not have a continuous sidewalk network.</p> <p>Students walking or bicycling to school need to use or cross the access drive to reach the school main entrance.</p> <p>Relocating the pick-up and drop-off site would minimize conflicts on the school grounds and parking lot areas.</p>	<p>A1. Relocate the pick up and drop off location in front of the school gymnasium southwest of the school main entrance. Delineate a separated bus-only travel lane at the proposed pick-up and drop-off location. Install a sidewalk on the southwest side of the proposed bus travel lane in between the bus lane and the faculty parking lot.</p>	Short term	<p><input checked="" type="checkbox"/> <i>Safety concerns</i></p> <p><input checked="" type="checkbox"/> <i>Existing walking or bicycling routes</i></p> <p><input checked="" type="checkbox"/> <i>Priorities for the school community</i></p>	High
		<p>A2. Reconfigure the existing faculty parking spaces away from the front of the school gymnasium in order to relocate the bus drop off to this location. Restripe parking lines for head-to-head vehicle parking. Explore the potential for proposing an angled parking layout for the faculty parking lot to provide additional clearance for the bus lane.</p>	Short term		
		<p>A3. Install two sidewalk segments to connect the school entrance to the gymnasium to Main Street: one segment from the southwest end of the faculty parking lot connecting to the existing sidewalk southwest of the school main entrance and one segment from the northeast side of the school main entrance connecting to the existing sidewalk on the northeast side of the school.</p>	Short term		

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
<p>B</p> <p>School Parking Lot</p> <p>There is a large amount of open pavement and a T-shaped parking lot that is challenging to navigate on foot or bicycle.</p>	<p>The existing parking lot travel conditions are an unorganized environment for pedestrians. The lack of defined space for students walking to school creates an uncomfortable experience for the user.</p> <p>The secondary parking lot receives walkers traveling southeast of the school during arrival/dismissal.</p> <p>Existing bike parking does not provide shelter from inclement weather.</p>	<p>B1. Install a sidewalk on the southwest side of the existing parking lot from High Street to the school main entrance/exit. Construct an accessible driveway apron to define and separate the parking lot from the maintenance lot crossing the area southwest of High Street. Realign existing parking spaces on the southwest side of the parking lot to the northeast to accommodate space for the proposed sidewalk.</p>	Short term	<p><input checked="" type="checkbox"/> <i>Safety concerns</i></p> <p><input checked="" type="checkbox"/> <i>Existing walking or bicycling routes</i></p> <p><input checked="" type="checkbox"/> <i>Priorities for the school community</i></p>	High
		<p>B2. Install high-visibility, durable, ladder-style crosswalks across the existing bus lane, faculty parking lot, and proposed bus travel lane.</p>	Short term		
		<p>B3. Install curb extensions on both sides of the school parking lot exit at High Street in order to enforce one-way operations. (No proposed crosswalk.)</p>	Short term		
		<p>B4. Upgrade the existing bike parking with a high-capacity, covered, and secure facility at the existing bike parking location.</p>	Long term		

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
<p>C</p> <p>Main Street/Route 4A</p> <p>This is a Class 1 roadway with two, 12-foot travel lanes. Parking is permitted on the north side. The curb to curb width is 32-feet.</p> <p>The posted speed limit is 25 mph inside the school zone and 35 mph outside the school zone.</p> <p>Main Street /Route 4A provides direct access to Vermont State Route 4 and the City of Rutland to the east.</p>	<p>Main Street/Route 4A is one of the direct routes for biking, walking, and motor vehicle travel to West Rutland School.</p> <p>Motorists were observed traveling at a high rate of speed, and high traffic volumes were present.</p> <p>The lack of high-visibility pedestrian crossings or flashing school zone signage on Main Street/Route 4A does not properly alert motorists that pedestrians are active and potentially crossing the road in this corridor.</p>	C1. Restripe all existing crosswalks from Barnes Street to Ross Street with high-visibility, durable, ladder-style crosswalks.	Short term	<input checked="" type="checkbox"/> <i>Safety concerns</i> <input checked="" type="checkbox"/> <i>Existing walking or bicycling routes</i> <input checked="" type="checkbox"/> <i>Priorities for the school community</i>	High
		C2. Install an ADA-compliant curb extension and accessible ramp on the southwest side of Main Street/Route 4A at the existing crosswalk location near the school driveway. The extension should match existing road dimensions north of this location where a planting strip exists on either side of the roadway.	Short term		
		C3. Add an amber flashing beacon to both existing school (S1-1) signs. The proposed beacon lights shall flash only during arrival and dismissal hours when school is in session. Replace the existing 'AHEAD' plaque with 'SCHOOL' (S4-3p) plaque at both existing school sign locations. The signs shall be a high fluorescent yellow/green color.	Short term		

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
<p>D</p> <p>Chapel Street/Franklin Street/High Street/Ross Street</p> <p>This is a five-way intersection that is stop-controlled on each street.</p>	<p>The intersection of Chapel Street, Franklin Street, High Street, and Ross Street is one of the major crossings for biking and walking from the southeast toward West Rutland School.</p> <p>Enhanced crossing treatments will improve visibility of pedestrians to motorists.</p>	<p>D1. Restripe all existing crosswalks with high-visibility, durable, ladder-style pavement markings.</p>	<p>Short term</p>	<p><input checked="" type="checkbox"/> <i>Safety concerns</i></p> <p><input checked="" type="checkbox"/> <i>Existing walking or bicycling routes</i></p> <p><input checked="" type="checkbox"/> <i>Priorities for the school community</i></p>	<p>Low</p>

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
<p>E</p> <p>Campbell Avenue</p> <p>This is a one-way, Class 3 roadway with on-street parking permitted on both sides. The pavement width is 26-feet.</p>	<p>Campbell Avenue connects Main Street/Route 4A to Marble Street and is utilized by students traveling from the neighborhood northeast of the school.</p> <p>There are no sidewalks on Campbell Avenue. Students walk in the roadway along this route due to a lack of separated pedestrian facilities.</p>	E1. Install a sidewalk on the west side of Campbell Avenue from Main Street/Route 4A to Marble Street.	Short term	<input checked="" type="checkbox"/> <i>Safety concerns</i> <input checked="" type="checkbox"/> <i>Existing walking or bicycling routes</i> <input checked="" type="checkbox"/> <i>Priorities for the school community</i>	Low
		E2. Install two ADA-compliant curb ramps on Campbell Avenue at the Marble Street intersection.	Short term		
		E3. Install a high-visibility, durable, ladder-style crosswalk across Campbell Avenue at the Marble Street intersection.	Short term		
		E4. Install 'NO PARKING' signs on the southeast side of Campbell Avenue and consolidate on-street parking to the north side to provide adequate clearance for a sidewalk.	Short term		
		E5. Restripe the existing crosswalk across Campbell Avenue at the Main Street/Route 4A intersection with high-visibility, durable, ladder-style pavement markings.	Short term		

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
<p>F</p> <p>Thrall Avenue</p> <p>This is a Class 3 road with a pavement width of 28-feet.</p>	<p>Thrall Avenue connects the residential neighborhood across the railroad tracks northeast of the school.</p> <p>Sidewalks exist on the north side of Thrall Avenue from Marble Street to Sheldon Avenue only. There is no sidewalk on the north side of Thrall Avenue from Sheldon Avenue to Pleasant Street which isolates students living along and nearby Pleasant Street.</p>	F1. Install sidewalk on the north side of Thrall Avenue from Sheldon Avenue to Pleasant Street.	Short term	<input checked="" type="checkbox"/> <i>Safety concerns</i> <input checked="" type="checkbox"/> <i>Existing walking or bicycling routes</i> <input checked="" type="checkbox"/> <i>Priorities for the school community</i>	Medium
		F2. Restripe all existing crosswalks with high-visibility, durable, ladder-style pavement markings from Marble Street to Pleasant Street.	Short term		
		F3. Install a high-visibility, durable, ladder-style crosswalk on the north side of Thrall Avenue across Sheldon Avenue.	Short term		
		F4. Install ADA-compliant accessible ramps at both ends of the proposed crossing in F3.	Short term		

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
<p>G</p> <p>Clarendon Avenue</p> <p>This is a Class 1 road with two, 11-foot travel lanes and 5-foot bicycle lanes.</p> <p>The bike lanes are striped from Main Street/Route 4A to the off-road shared-use path across the street from Casella Lane.</p> <p>There is an existing off-road shared-used path from the West Rutland Recreation Center to Clarendon Avenue.</p>	<p>Clarendon Avenue connects the school with the residential neighborhood south of Main Street/Route 4A and the West Rutland Recreation Center.</p> <p>Enhanced crossing treatments and signage will improve visibility of cyclists and pedestrians to motorists.</p> <p>Students living south of the school currently use an unofficial off-road connection around the West Rutland School sports fields and connect to Ross Street or Meade Street.</p>	G1. Restripe all existing crosswalks with high-visibility, durable, ladder-style pavement markings from Main Street/Route 4A to Meadow Lane and Blanchard Avenue/Franklin Street to High Street.	Short term	<p><input checked="" type="checkbox"/> <i>Safety concerns</i></p> <p><input checked="" type="checkbox"/> <i>Existing walking or bicycling routes</i></p> <p><input checked="" type="checkbox"/> <i>Priorities for the school community</i></p>	High
		G2. Install a sidewalk on the east side of Clarendon Avenue from Fairview Avenue to the shared use path connection on Clarendon Avenue. Install a sidewalk on the west side of Clarendon Avenue from South Lane to Skyline Drive. The proposed sidewalks shall be ADA compliant, and may require permanent or temporary easement/permits and right-of-way due to the existing drainage culvert.	Short term		
		G3. Install a high-visibility, durable, crosswalk across Fairview Avenue at the Clarendon Avenue intersection to connect to the new receiving sidewalk.	Short term		
		G4. Install a high-visibility, durable, crosswalk crossing South Lane and Skyline Drive at the Clarendon Avenue intersection to connect to the new receiving sidewalk.	Short term		

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
G Clarendon Avenue Continued		G5. Install ADA-compliant accessible ramps at all proposed crosswalks.	Short term	<input checked="" type="checkbox"/> <i>Safety concerns</i> <input checked="" type="checkbox"/> <i>Existing walking or bicycling routes</i> <input checked="" type="checkbox"/> <i>Priorities for the school community</i>	High
		G6. Install an accessible, off-road, shared-use path on the school property from the southwest edge of the faculty parking lot to Ross Street. The proposed path shall require ADA compliance, necessary easements, and parcel ownership verification.	Short term		
		G7. Install an accessible, off-road, shared-use path from Ross Street to Meade Street. The proposed path will require ADA compliance, necessary easements, and parcel ownership verification.	Long term		

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
<p>H</p> <p>School Path</p> <p>An informal path currently connects Main Street/Route 4A and the West Rutland School.</p>	<p>Students living north and east of the school currently use this unofficial off-road path to reach school.</p> <p>There is a desire for a shared-use path for students walking north and east to bypass the vehicular traffic during pick-up and drop-off activities.</p>	<p>H1. Install an accessible, off-road, shared-use path at the north west edge of the school property connecting at Main Street/Route 4A. The proposed path will require ADA compliance, necessary easements, and parcel ownership verification.</p>	<p>Short term</p>	<p><input checked="" type="checkbox"/> <i>Safety concerns</i></p> <p><input checked="" type="checkbox"/> <i>Existing walking or bicycling routes</i></p> <p><input checked="" type="checkbox"/> <i>Priorities for the school community</i></p>	<p>High</p>

APPENDIX D

RUTLAND REGIONAL PLANNING COMMISSION MAP FIGURES

Figure 1
Overall Map of West Rutland and School Location

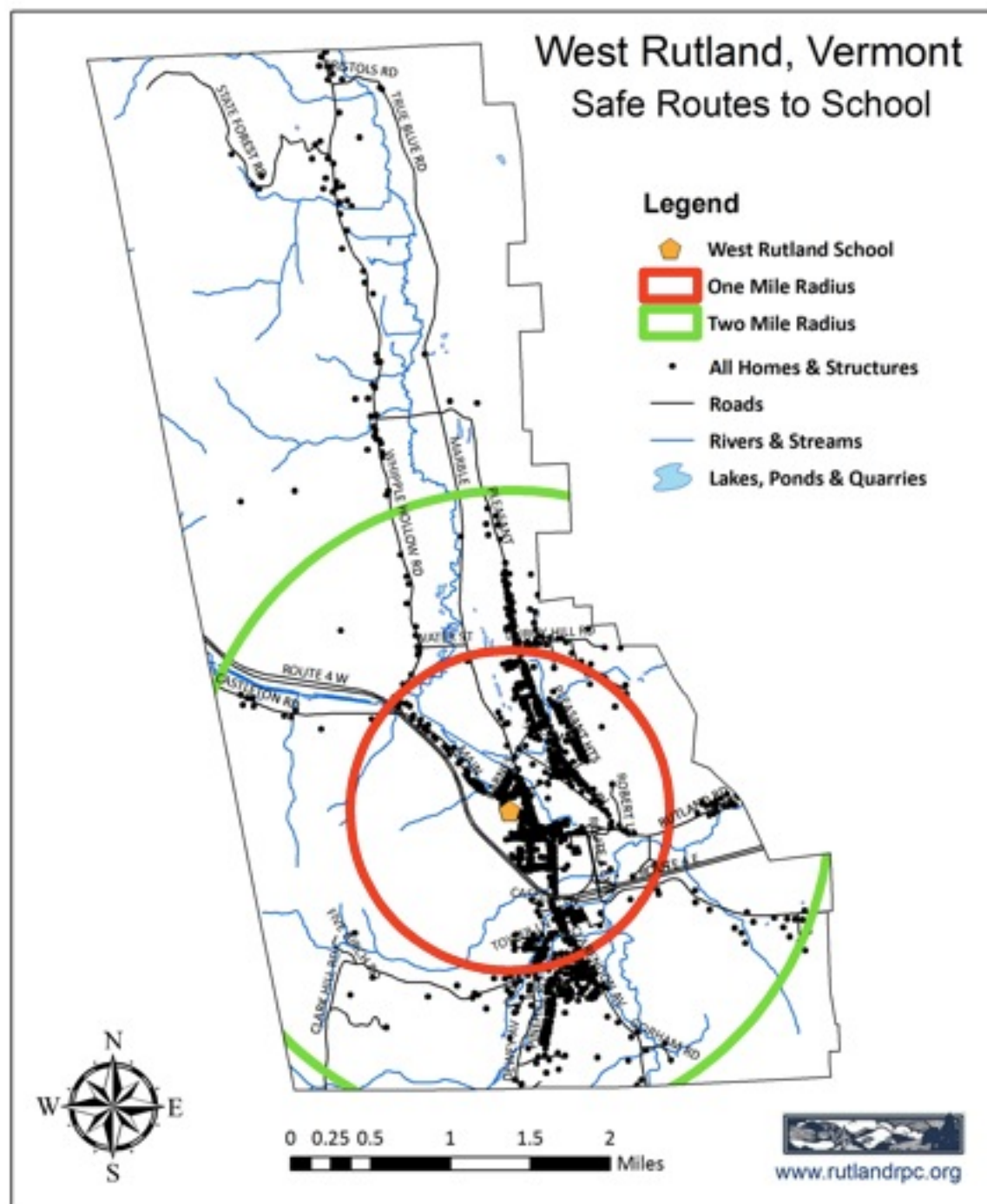
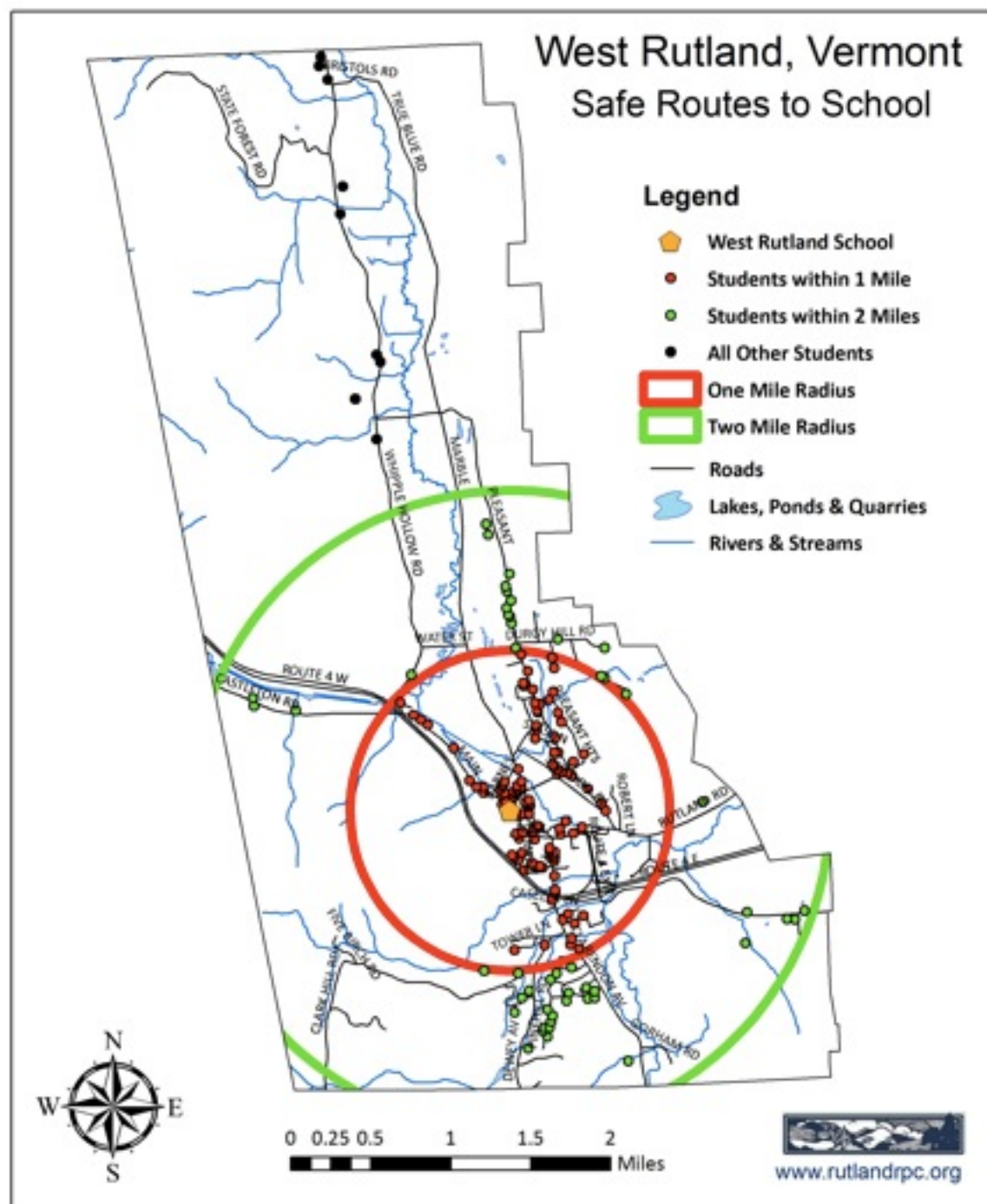


Figure 2

Student Proximity to West Rutland School



APPENDIX E

STUDENT TRAVEL TALLY FEBRUARY 2012/PARENT SURVEY REPORTS
APRIL 2012

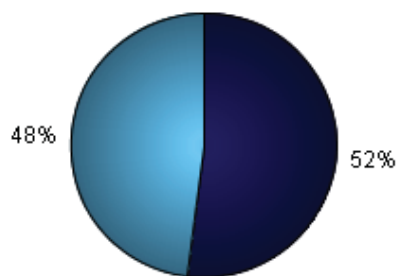
Parent Survey Aggregate Summary

Program Name:	West Rutland School 2359			Date range:	Spring 2012 (January - June 2012)
				Date Report Generated:	04/27/2012
School Name(s):	Month & Year Collected & (Set ID)	School Enrollment:	Enrollment in Grades Targeted by SRTS Program:	Number of Questionnaires Distributed:	Number of Questionnaires Included in Report:
West Rutland School	March 2012 (7751)	336	336	336	98
			Total:	336	98

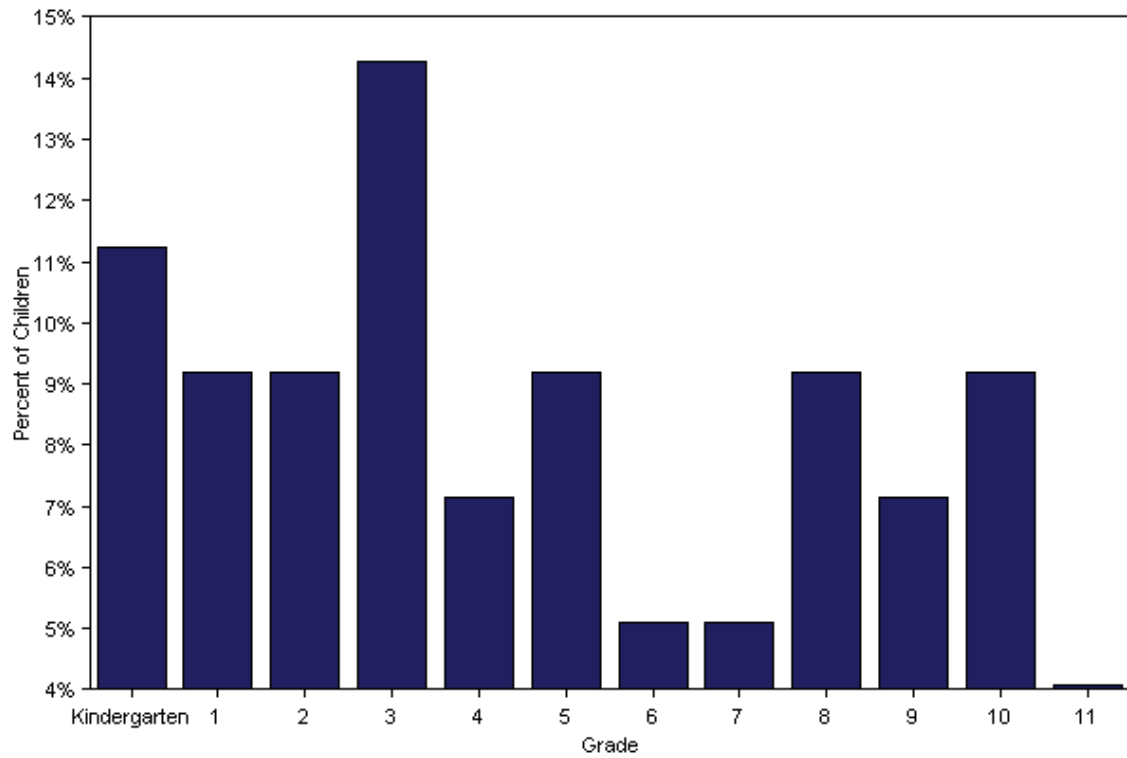
This report contains information from parents about their children's trip to and from school. The report also reflects parents' perceptions regarding whether walking and bicycling to school is appropriate for their child. The data used in this report were collected using the Survey about Walking and Biking to School for Parents form from the National Center for Safe Routes to School.

Sex of children for parents that provided information

■ Male ■ Female



Grade levels of children represented in survey



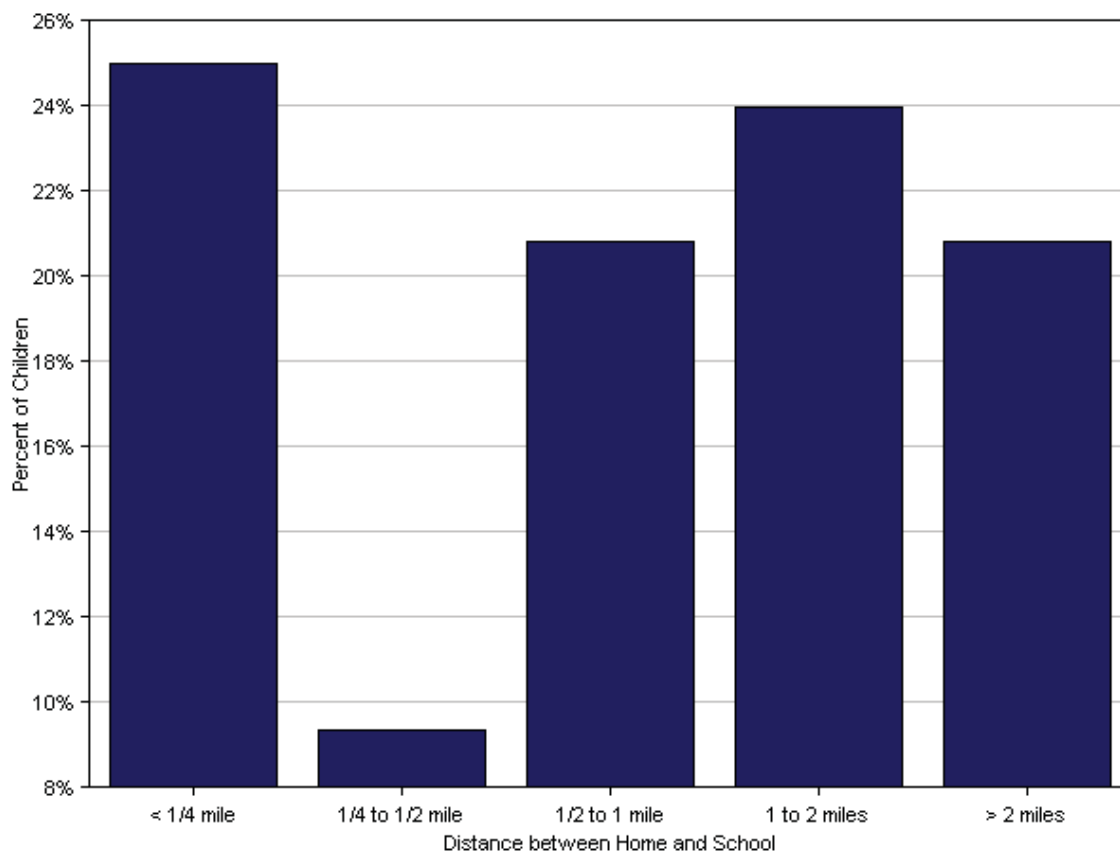
Grade levels of children represented in survey

Grade in School	Responses per grade	
	Number	Percent
Kindergarten	11	11%
1	9	9%
2	9	9%
3	14	14%
4	7	7%
5	9	9%
6	5	5%
7	5	5%
8	9	9%
9	7	7%
10	9	9%
11	4	4%

No response: 0

Percentages may not total 100% due to rounding.

Parent estimate of distance from child's home to school



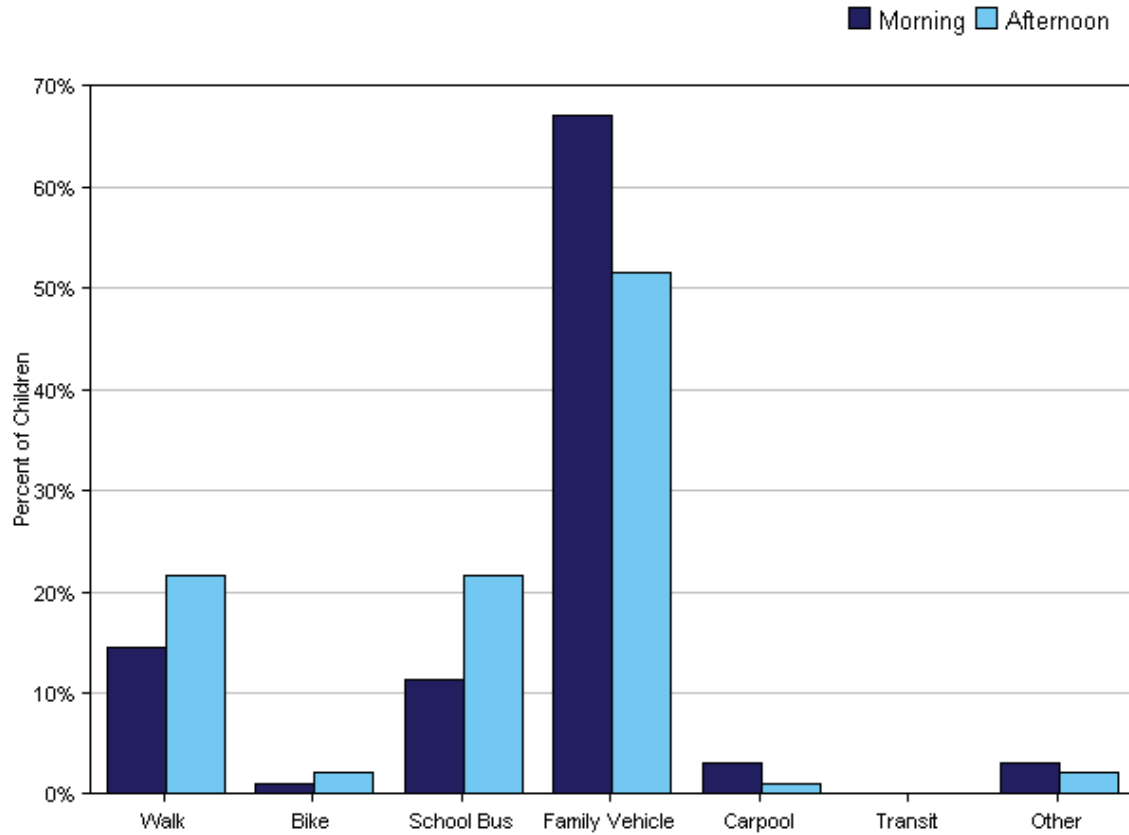
Parent Survey Aggregate Summary

Distance between home and school	Number of children	Percent
Less than 1/4 mile	24	25%
1/4 mile up to 1/2 mile	9	9%
1/2 mile up to 1 mile	20	21%
1 mile up to 2 miles	23	24%
More than 2 miles	20	21%

Don't know or No response: 2

Percentages may not total 100% due to rounding.

Typical mode of arrival at and departure from school



Typical mode of arrival at and departure from school

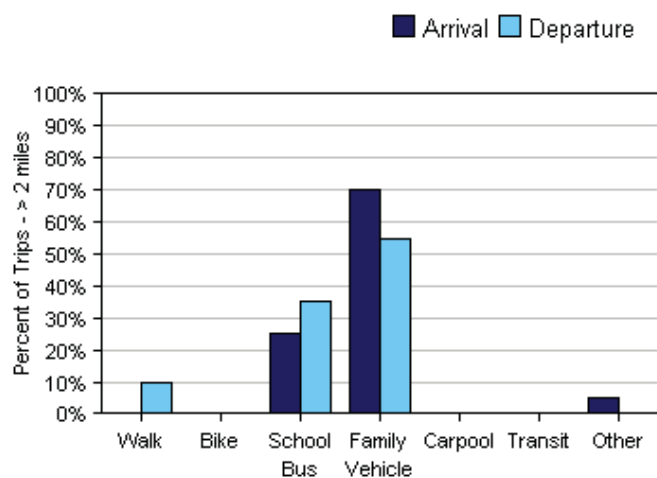
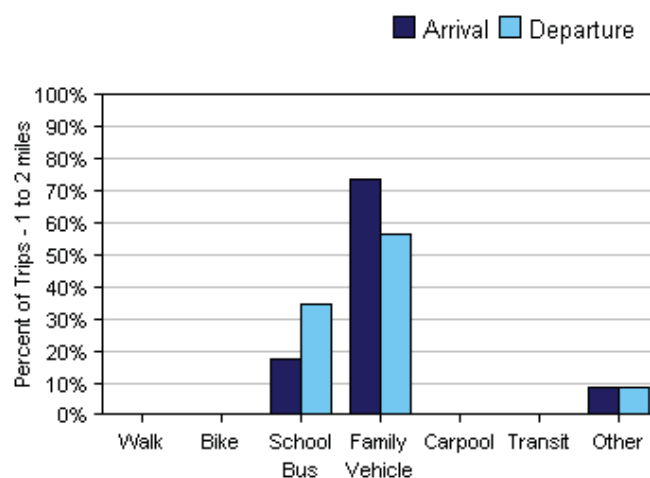
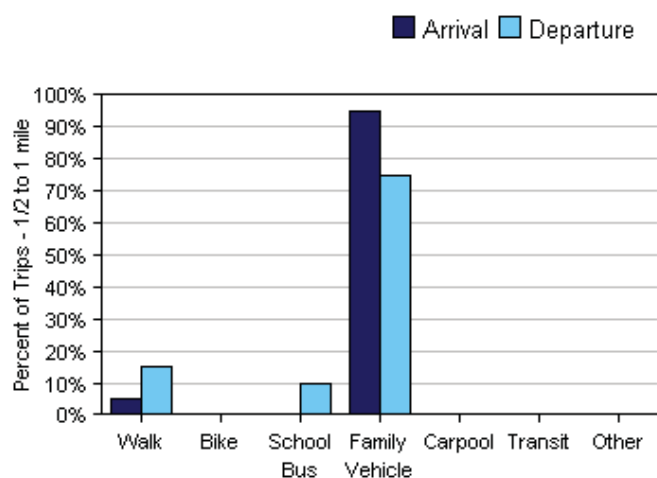
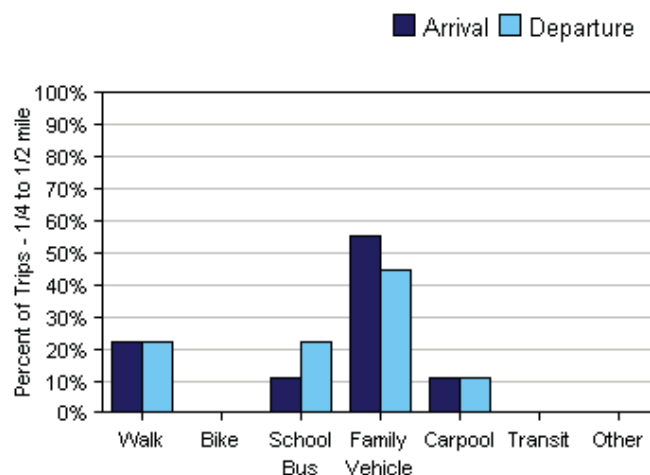
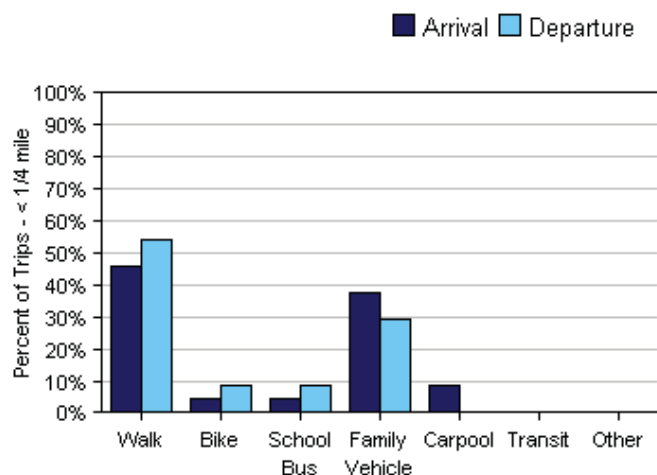
Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	97	14%	1%	11%	67%	3%	0%	3%
Afternoon	97	22%	2%	22%	52%	1%	0%	2%

No Response Morning: 1

No Response Afternoon: 1

Percentages may not total 100% due to rounding.

Typical mode of school arrival and departure by distance child lives from school



Typical mode of school arrival and departure by distance child lives from school

School Arrival

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	24	46%	4%	4%	38%	8%	0%	0%
1/4 mile up to 1/2 mile	9	22%	0%	11%	56%	11%	0%	0%
1/2 mile up to 1 mile	20	5%	0%	0%	95%	0%	0%	0%
1 mile up to 2 miles	23	0%	0%	17%	74%	0%	0%	9%
More than 2 miles	20	0%	0%	25%	70%	0%	0%	5%

Don't know or No response: 2

Percentages may not total 100% due to rounding.

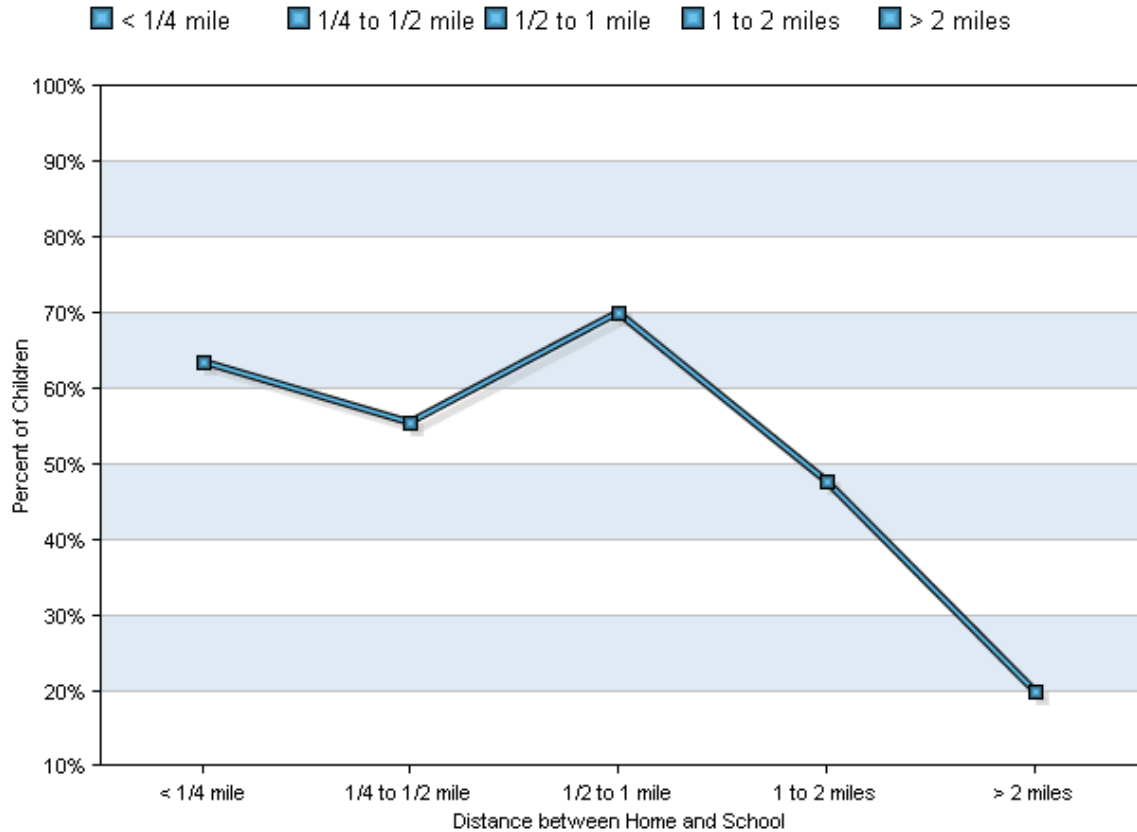
School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	24	54%	8%	8%	29%	0%	0%	0%
1/4 mile up to 1/2 mile	9	22%	0%	22%	44%	11%	0%	0%
1/2 mile up to 1 mile	20	15%	0%	10%	75%	0%	0%	0%
1 mile up to 2 miles	23	0%	0%	35%	57%	0%	0%	9%
More than 2 miles	20	10%	0%	35%	55%	0%	0%	0%

Don't know or No response: 2

Percentages may not total 100% due to rounding.

Percent of children who have asked for permission to walk or bike to/from school by distance they live from school



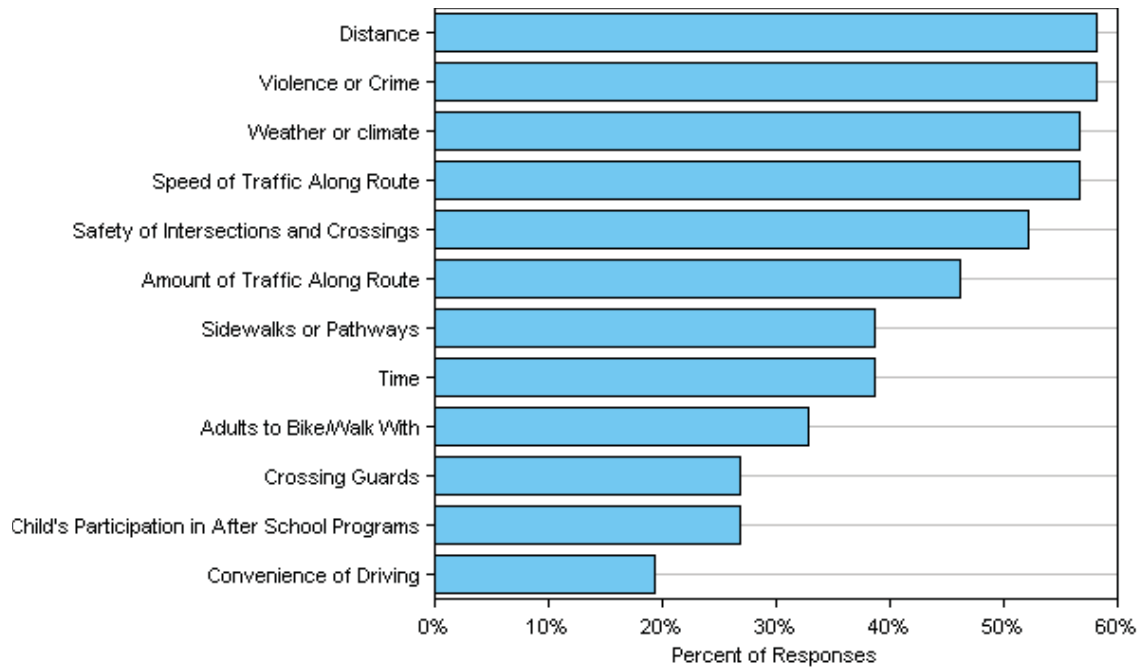
Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

Asked Permission?	Number of Children	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Yes	48	64%	56%	70%	48%	20%
No	46	36%	44%	30%	52%	80%

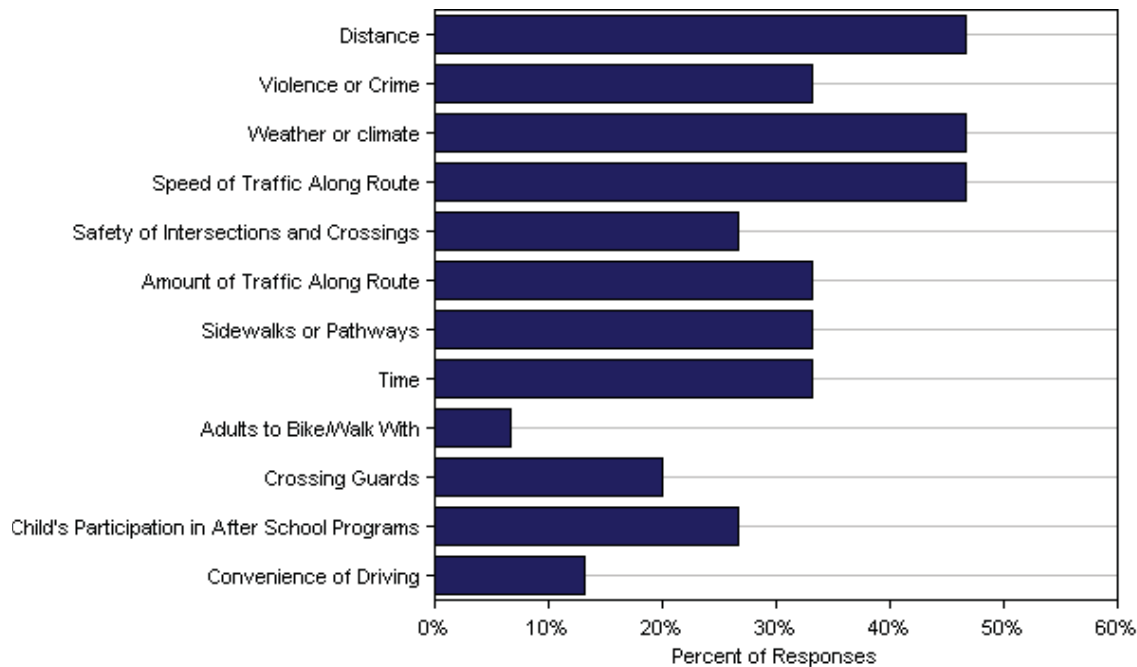
Don't know or No response: 4

Percentages may not total 100% due to rounding.

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school



**Issues reported to affect the decision to allow a child to walk or bike to/from school by
parents of children who already walk or bike to/from school**

Issue	Child does not walk/bike to school	Child walks/bikes to school
Distance	58%	47%
Violence or Crime	58%	33%
Weather or climate	57%	47%
Speed of Traffic Along Route	57%	47%
Safety of Intersections and Crossings	52%	27%
Amount of Traffic Along Route	46%	33%
Sidewalks or Pathways	39%	33%
Time	39%	33%
Adults to Bike/Walk With	33%	7%
Crossing Guards	27%	20%
Child's Participation in After School Programs	27%	27%
Convenience of Driving	19%	13%
Number of Respondents per Category	67	15

No response: 16

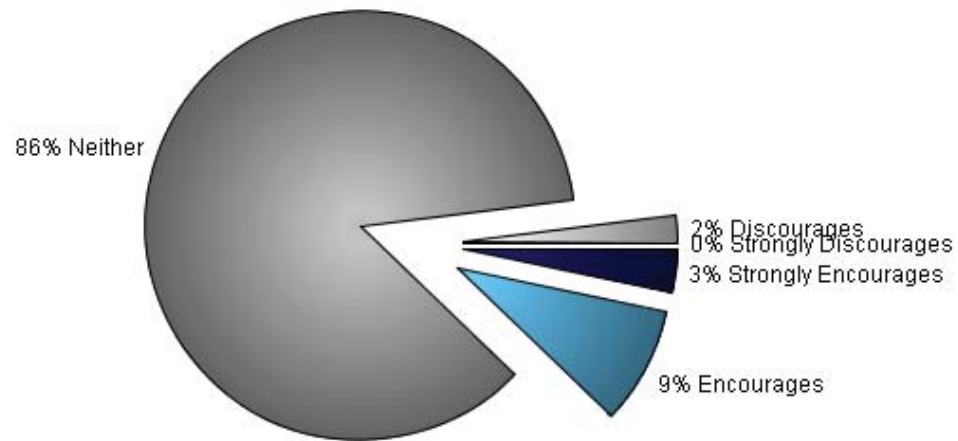
Note:

--Factors are listed from most to least influential for the 'Child does not walk/bike to school' group.

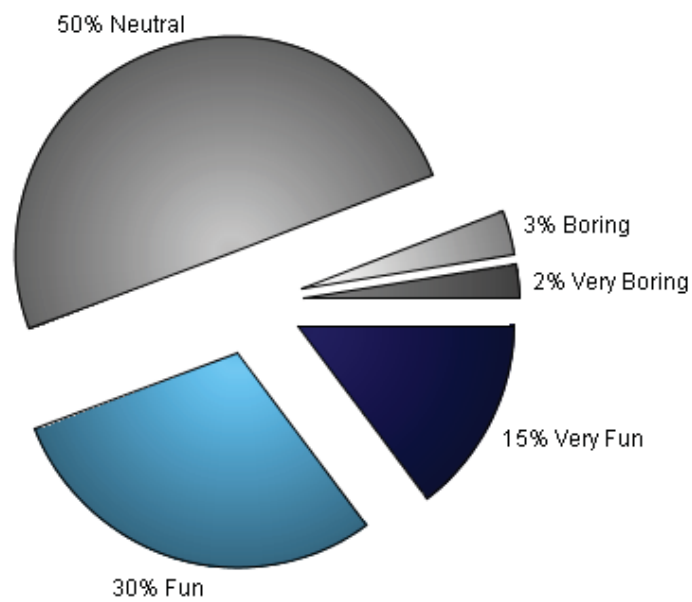
--Each column may sum to > 100% because respondent could select more than issue

--The calculation used to determine the percentage for each issue is based on the 'Number of Respondents per Category' within the respective columns (Child does not walk/bike to school and Child walks/bikes to school.) If comparing percentages between the two columns, please pay particular attention to each column's number of respondents because the two numbers can differ dramatically.

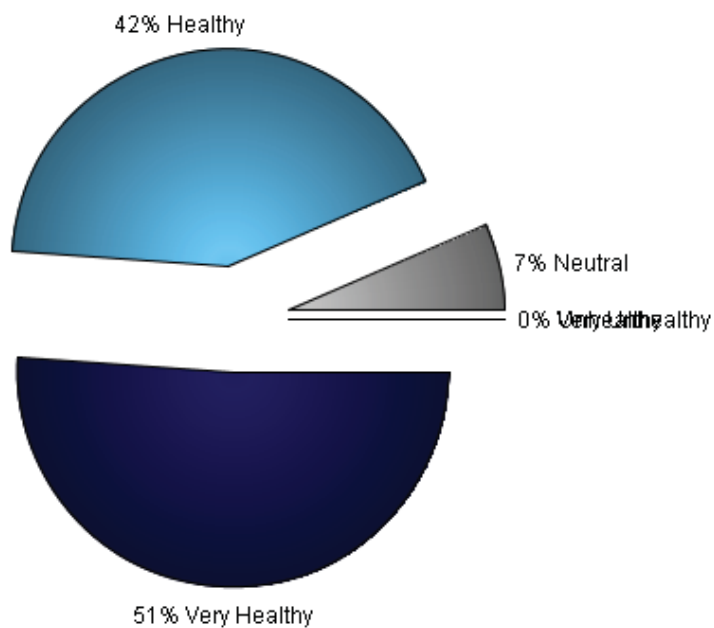
Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school



Parents' opinions about how much fun walking and biking to/from school is for their child



Parents' opinions about how healthy walking and biking to/from school is for their child



Comments Section

School	SurveyID	Comment
West Rutland School	825469	The school does not currently encourage walking and biking, but they are working on it.
West Rutland School	825492	Safety is my main reason for not allowing our young child to walk to school.
West Rutland School	825503	My grade completed has no bearance on whether I allow my child to walk to school.
West Rutland School	825505	I would love for my children to walk/bike to school! I worry about the traffic on Pleasant Street and the kidnappers.
West Rutland School	825511	It does not matter your educational level.
West Rutland School	825521	If my child was in 4th grade he could walk/bike to school with another responsible student/friend.
West Rutland School	825527	I do not feel good about my child walking to school for there are too many distractions for them to get there on time and some of the kids that walk to school I do not trust.
West Rutland School	825544	I think 6 is too young to walk without a [trusted] grown-up.
West Rutland School	825550	I walk/bike my child to and from school weather permitting, in inclimate weather we drive. I don't think I will ever be comfortable with them walking or biking alone, too many things could happen.
West Rutland School	825557	It doesn't apply to us, we live about 2.5 miles from the school out on 4A
West Rutland School	825572	Would also like to see children take a bike course for riding on roads and knowing the proper rules
West Rutland School	825579	Too many hills to climb home.
West Rutland School	825632	The area we live in is in a zone we don't feel is safe. No house and we found out a child pedophile was living at the end of the road. Maybe 3 kids walk to school on that road and we don't think its safe at any age.
West Rutland School	825643	Very hard to fill out when living a 40 minute bus ride away. Not realistic to ride a bike or walk. If we lived 2 miles away it would be doable.
West Rutland School	825649	I feel this does not apply to use because we live in Ira.
West Rutland School	825678	How to you plan to change the distance from my home to school?

West Rutland School	825684	All three of my children walk to and from school together or I may meet them there after school. We only live down the street so I can easily watch them from my window.
West Rutland School	825687	There are no sidewalks on my road, not on Meadow Lane. It's not until Clarendon Ave that there are sidewalks, the walk down the hill is very dangerous. Especially so when road conditions are very poor.
West Rutland School	825716	We live too far- can't fix distance and that is the main reason.
West Rutland School	825721	I have a daughter and I am concerned about the safety (i.e. sexual predators) overall street and sidewalks are well maintained. I walk them to school occasionally.
West Rutland School	825732	Amount of gear to carry also impacts (i.e. backpack, sports bag, bat, glove, clothing, soccerball, cleats). Too much to carry on a bike safely.
West Rutland School	825739	When my child is older, I will let him walk or ride his bike to school.
West Rutland School	825740	There are also known sex offenders in the area that greatly affect my decision.
West Rutland School	825741	Walking or biking simply is not a safe situation for my children.
West Rutland School	825742	My daughter always calls me when she is done with school and my son does too.
West Rutland School	825743	Violence and/or crime are the major issues affecting my decision not to allow my son to walk the entire distance to school. He does occasionally take the bus and walk approx. 1/4 mile to school.
West Rutland School	825744	If a school bus came up our road, we would not have to take the time to fill out this survey
West Rutland School	825745	Child feels not fun to far away
West Rutland School	825746	All three of my children walk to and from school together.
West Rutland School	825747	All three of my children walk to and from school together.

APPENDIX F: NON-ENGINEERING STRATEGIES RESOURCE GUIDE

Strategy	E's	Advantages	Considerations	Resources
<p>Walking and Biking Safety Curriculum and/or Assembly</p> <p>These lessons can be held in the fall to promote Walk to School Day. Guest speakers teach the students pedestrian and bicycle safety skills that they can use when walking and biking to school.</p> <p>Instruction as a part of school curriculum is also vital to ensuring on-going learning of bicycle and pedestrian safety and development of skills.</p>	<p>Education, Encouragement</p>	<ul style="list-style-type: none"> • Assures all children learn bicycle and pedestrian safety skills • Establishes habits that benefit children throughout their lives, regardless of whether they currently walk or bike to school • Establishes consistent messages for young pedestrians and bicyclists • Provides a refresher for parents if take home materials are provided in conjunction with the assembly. It's never too late to correct bad habits. • Events can make learning fun, and help strengthen community ties with event organizers and participants. 	<ul style="list-style-type: none"> • Best taught using a combination of methods, including one-time instruction (e.g. assemblies), multi-lesson classroom curricula, and skills practice (e.g. bicycle safety fairs). • Requires able and willing instructors • Should be age-appropriate • Bicycle safety education may require an outside instructor, e.g. a police officer. 	<ul style="list-style-type: none"> • Walk Smart/Bike Smart Vermont! http://healthandlearning.org/documents/WalkSmartBikeSmartFINAL2008_001.pdf • National Highway Traffic Safety Administration Pedestrian Safety Lessons http://www.nhtsa.gov/ChildPedestrianSafetyCurriculum • WalktoSchool.org - Classroom activities that encourage walking and biking. www.walktoschool.org/eventideas/classroom.cfm • Willie Whistle - The National Highway Traffic Safety Association has created a video to help teach children pedestrian safety skills. http://www.nhtsa.gov/people/injury/willie/willie.zip • See Partner Resource CD for more materials

Strategy	E's	Advantages	Considerations	Resources
<p>Continue to Participate in Walk to School Day</p> <p>Walk to School Day is a one-day event that celebrates walking and biking to school.</p> <p>Generally this event is scheduled for the first full week in October. Why not use this strategy multiple times a year?</p>	Education, Encouragement	<ul style="list-style-type: none"> • Excellent kick-off event for Safe Routes to School program • Generates enthusiasm for walking and biking • Way to raise community awareness about safety issues • Can be as simple as a few kids and parents meeting to walk to school or very elaborate celebrations • Can be folded into studies of international cultures as it is an international event • Date is flexible- to be counted by the National Center for Safe Routes to school the event need only take place before Dec 1. 	<ul style="list-style-type: none"> • Preparations for elaborate celebrations must begin several months in advance to allow time to identify partners, plan activities, and promote the event • Should provide bicycle and pedestrian safety information to children and parents • International Walk to School Day takes place in October but some schools organize multiple Walk to School Day (or "Walk and Roll Day") events over the course of the school year (e.g. one in the fall and one in the spring). 	<ul style="list-style-type: none"> • U.S. Walk to School Day website (provides resources and event registration): www.walktoschool.org • International Walk to School Day website: www.iwalktoschool.org/ • Plan and promote your Walk to School Day event http://saferoutes.vermont.gov/sites/saferoutes/files/PDFs/How%20To%20-%20Special%20Events.pdf • Include students when it is too far or unsafe http://saferoutes.vermont.gov/sites/saferoutes/files/Including%20Students%20When%20It%27s%20Too%20Far%20or%20Unsafe%20VT.pdf • See Partner Resource CD for more materials
<p>Frequent Walker/Bicyclist Program or Walking Wednesdays</p> <p>Track and reward students who walk and bicycle to school. Can be an individual competition or a competition among classes.</p>	Encouragement	<ul style="list-style-type: none"> • Provides positive reinforcement for walking and bicycling. • Children respond to incentives. • Can include all students. • Can include walking and bicycling beyond the trip to school. 	<ul style="list-style-type: none"> • Necessary to identify a coordinator. • Establish a simple record-keeping system. • Establish age-appropriate goals. • Consider giving rewards to parents as well, since parents are often involved in the commute to school. 	<ul style="list-style-type: none"> • Frequent Walker Punch card template http://saferoutes.vermont.gov/sites/saferoutes/files/PDFs/VT_SRTS_Punchcard_v2_110825-1.png • Vermont Challenge: Walk Across America http://saferoutes.vermont.gov/sites/saferoutes/files/PDFs/The%20VT%20Challenge%20-%20Walk%20Across%20Vermont%21.pdf • Tips for creating a walking and bicycling route map http://saferoutes.vermont.gov/sites/saferoutes/files/PDFs/Tips%20for%20Creating%20Walking%20and%20Bicycling%20Route%20Maps.pdf • See Partner Resource CD for more materials

Strategy	E's	Advantages	Considerations	Resources
<p>Traffic Enforcement (Staff/Crossing Guards)</p> <p>This can be an ongoing program for school staff and crossing guards. This works well if the school has an existing reward point program.</p>	<p>Education, Enforcement, Encouragement</p>	<ul style="list-style-type: none"> • Crossing guards play an important role in helping children cross the street at key locations, reminding drivers of the presence of pedestrians, and making parents feel more comfortable about letting their children walk and bicycle to school. • Staff and crossing guards can also reward students who are “caught being good” by issuing School Reward Points. 	<ul style="list-style-type: none"> • Requires some training and coordination with crossing guards 	<ul style="list-style-type: none"> • Adult School Crossing Guard Guidelines (NCSRTS) http://guide.saferoutesinfo.org/crossing_guard/pdf/crossing_guard_guidelines_web.pdf • Florida School Crossing Guard Training Guidelines http://saferoutesinfo.org/program-tools/florida-school-crossing-guard-training-guidelines • Lessons from Florida’s Crossing Guard Program http://saferoutesinfo.org/events-and-training/srts-webinars/lessons-floridas-crossing-guard-program • See Partner Resource CD for more materials

Strategy	E's	Advantages	Considerations	Resources
Bicycle Safety Fair This is a single-day event that promotes bicycle safety. At the bicycle safety fair, students can borrow bicycles or bring their own.	Education, Encouragement	<ul style="list-style-type: none"> Events like bike safety fairs make learning fun and can help strengthen community ties with event organizers and participants. At the bicycle safety fair students learn safety skills such as how to properly wear a helmet and how to behave while bike riding. The bicycle safety fair can also have a closed "test course" for the students to ride along. This helps the students to practice in a safe environment and gain confidence in their decision-making skills. One possible partner for this is the local police department. 	<ul style="list-style-type: none"> Requires able and willing instructors Should be age-appropriate Bicycle safety education may require an outside instructor, e.g. a police officer. These events require planning and materials to share with students 	<ul style="list-style-type: none"> Teaching a Bicycle Safety Fair in Vermont http://www.vtbikeped.org/what/VT_Safety_Fair_Curriculum.pdf Bicycling Life page on bicycle safety fairs: http://www.bicyclinglife.com/SafetySkills/BicycleRodeo.htm An organizer's guide to bicycle safety fairs http://www.bike.cornell.edu/pdfs/Bike_Rodeo_404.2.pdf Easy steps to properly fit a bicycle helmet http://www.nhtsa.gov/people/injury/pedbimot/bike/EasyStepsWeb/
Walk Audit/Parent Surveys / Student tallies The team will meet annually (ideally in August before school starts) to review the accomplishments from the previous year and set new goals for the upcoming school year.	Evaluation	<ul style="list-style-type: none"> Establishes baseline information on student travel behavior and perceived barriers to walking and biking Helps determine existing needs Helps determine success of SRTS efforts and identify needed adjustments 	<ul style="list-style-type: none"> Best to conduct initial surveys before SRTS measures have been implemented Requires teacher buy-in and administrative organization Getting parents to fill out and return surveys can be a challenge. Follow up is necessary. Consider a contest among classes for highest rate of return. 	<ul style="list-style-type: none"> Student In-Class Travel Tally Form: http://www.saferoutesinfo.org/resources/evaluation_student-in-class-travel-talley.cfm Parent Survey Form: http://www.saferoutesinfo.org/resources/evaluation_parent-survey.cfm Instructions for Survey Administration: http://www.saferoutesinfo.org/resources/evaluation_instructions.cfm Instructions for Data Entry: http://www.saferoutesinfo.org/resources/evaluation_cover-sheets.cfm

Strategy	E's	Advantages	Considerations	Resources
Walking School Buses/ Bicycle Trains Walking school buses and bicycle trains are adult supervised groups of students walking and/or bicycling to school.	Education, Encouragement	<ul style="list-style-type: none"> • Adult supervision on the walk to school • Can be loosely structured or highly organized • Can include a meeting point in a parking lot so children and parents who must drive can participate. • Adults can rotate who will lead each time. 	<ul style="list-style-type: none"> • Need to identify routes where conditions support walking and there is sufficient demand for supervised walking • Requires parents willing to walk with children and learn about how Walking school buses are organized and conducted. • More organized structure requires considerable planning 	<ul style="list-style-type: none"> • How to start a walking school bus or bike train http://guide.saferoutesinfo.org/walking_school_bus/pdf/wsb_guide.pdf
Drive Safe Campaigns Some parents are not aware of how their driving behavior can put walking students at risk. This teaches parents how their unsafe driving habits can put their children in danger.	Education	<ul style="list-style-type: none"> • Has the ability to positively effect change in and community around the school • Improves the safety of the walking environment • Good drivers can help to set the example for good behavior. This is especially true for helping to control speeds. 	<ul style="list-style-type: none"> • This requires a person to organize and administer the campaign. • May not be effective at schools where parent/teacher organizations are weak • Law enforcement officers would be great at speaking at the campaign events. Sometimes, due to their heavy schedules that can be difficult to pin down. • A good way to contact parents is at back to school night and PTA meetings. Starting at the beginning of the year helps to prevent bad habits from starting. Law enforcement officers (or other teachers) can hold a brief assembly to explain the dangers of unsafe driving in school areas. • Law enforcement officers can provide a demonstration of how difficult it is to quickly stop a moving vehicle at 50, 40 and 30 mph. The National Center has information on how the speed of the vehicle can affect the severity of injury that the pedestrian experiences in a crash. 	<ul style="list-style-type: none"> • Driving Around Schools: Keeping Children Safe http://apps.saferoutesinfo.org/lawenforcement/resources/driving_tips.cfm • Parents, Avoid Becoming a Traffic Hazard http://www.aaamidatlantic.com/FetchFile.ashx?id=e55bfa26-a70d-4e17-afde-073b86cc9975

APPENDIX G: INFRASTRUCTURE STRATEGIES RESOURCE GUIDE

Strategy	Advantages	Considerations	Resources	Actions
<p>Wide Paved Shoulders</p> <p>Wide paved shoulders are created by striping a roadway to provide space for a shoulder and a travel way for motor vehicles. Wide paved shoulders can be created by adding pavement to one or both sides of the paved roadway or by narrowing travel lanes.</p> <p>Current Vermont State Standards recommend ten-foot minimum travel lanes for state and local roads.</p>	<ul style="list-style-type: none"> • Provide room for pedestrians when there is no sidewalk or other facility. • Provide a clear space for bicyclists that is separated from the motor vehicle travel way. • Research has shown that by narrowing travel lanes, motor vehicle speeds might also be reduced. 	<ul style="list-style-type: none"> • Lane markings need to be bright and maintained to clearly delineate the motor vehicle travel lane. When lane markings fade, the travelway for motor vehicles appears to be wider, which tends to encourage motorists to travel at higher speeds. • When adding pavement to widen the roadway and accommodate shoulders, the base material for the shoulder needs to be integrated well with the base material under the existing road to minimize the potential for pavement cracking and settling that would create hazardous conditions for bicyclists and motorist. • The <i>Vermont State Standards</i> provide detailed information on appropriate travel lane and paved shoulder widths for different classifications of state roads. These standards also provide a guide for appropriate lane and shoulder widths for town roads. • Other considerations include right-of-way, drainage, grading, existing signs and structures, and utilities. 	<ul style="list-style-type: none"> • Vermont State Standards http://www.aot.state.vt.us/progdev/standards/statabta.htm 	<ul style="list-style-type: none"> • For town roads, start with discussions with the appropriate, Selectboard, Board of Trustees, or City Council (municipal legislators) and town officials, such as road commissioner and/or town engineer to determine the municipality's policies on travel lanes widths. Provide background information on the benefits of narrower travel lanes for speed reduction and safer conditions for pedestrians and bicyclists. • Review shoulder widening proposals with municipal officials. If sufficient pavement exists, suggest conducting an experiment with temporary striping to provide wider shoulders. • Follow up the experiment with feedback and request for comments from municipal officials and community.

Strategy	Advantages	Considerations	Resources	Actions
<p>Speed Feedback Signs</p> <p>Speed feedback signs, either temporary or permanent, show motorists how fast they are traveling as calculated by radar.</p>	<ul style="list-style-type: none"> Speed feedback signs tend to slow motorists and remind motorists of the posted speed limits. 	<ul style="list-style-type: none"> Speed feedback signs on state roads must follow the State's placement guidelines for state roads. Installing a feedback sign requires a highway access permit from the State. Permanent signs may be appropriate at school zones; elsewhere temporary signs, set up for short periods at various locations, can be more effective. 	<ul style="list-style-type: none"> <i>Guidelines for the Use of Radar Speed Feedback Signs on the State Highway System</i> http://www.aot.state.vt.us/documents/3014_Guidelines_on_the_Use_of_Radar_Speed_Feedback_Signs.pdf <i>Classification of Vermont Roads</i> http://maps.vermont.gov/imf/sites/ANR_NATRESViewer/jsp/ 	<ul style="list-style-type: none"> Review the State's speed feedback sign guidelines to be sure the proposed location is acceptable. Contact the municipality to determine the appropriate person to contact regarding the placement of speed feedback signs, either temporary or permanent. Check with the local police or sheriff to see if they have a portable trailer that can be used on a temporary basis as a trial. Contact the responsible party to understand their process for the placement of speed feedback signs and whether the sign should be temporary or permanent. Follow the process for installation of the speed feedback sign. If a temporary feedback sign was installed, review the results with the municipality to determine if it has been successful. If successful, suggest the municipality install a permanent speed feedback sign. Permanent feedback signs are an eligible use for SRTS funds. Check with the regional planning commission about this and other potential funding sources.

Strategy	Advantages	Considerations	Resources	Actions
<p>High-visibility Crosswalks</p> <p>High-visibility crosswalks are roadway markings designating a location for pedestrians to cross a roadway.</p> <p>High-visibility crosswalks are typically in locations that are convenient to pedestrians and visible to motorists. High-visibility crosswalks must be installed with reflective durable material.</p>	<ul style="list-style-type: none"> • Crosswalks provide notification to both pedestrians and motorists to where pedestrians may be crossing the roadway. • Pedestrians have the right-of-way when in a crosswalk and motorists are supposed to stop their vehicles until the pedestrian has cleared the roadway. 	<ul style="list-style-type: none"> • Pedestrians should assume that a motorist may not see them or stop. • Crosswalks should have a receiving facility, such as a path, sidewalk, or adequate shoulder for use by pedestrians on either end. • Crosswalks may be marked with different striping patterns but the most common pattern is the ladder style. Further considerations may be needed for crosswalks at unsignalized intersections and at mid-block locations to determine if the crosswalk is warranted. • Crosswalks are not appropriate for every location as they may give the pedestrian a perceived sense of safety that may not exist. 	<ul style="list-style-type: none"> • <i>Vermont Pedestrian and Bicycle Facility Planning and Design Manual</i> http://www.aot.state.vt.us/progdev/Sections/LTF%20Info/BikePedTOC.html • <i>Vermont's Guidelines for the Installation of Crosswalk Markings and Pedestrian Signing at Marked and Unmarked Crossings</i> http://www.aot.state.vt.us/progdev/sections/highway%20info/DocumentsRoadwayPages/TrafficOpsCrosswalk%20Guidelines%202004.pdfSafety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations http://www.fhwa.dot.gov/publications/research/safety/04100/04100.pdf • <i>Classification of Vermont Roads</i> http://maps.vermont.gov/imf/sites/ANR_NATRESViewer/jsp/ 	<ul style="list-style-type: none"> • For all classifications of roadways, state and local, consult with the regional planning commission about the appropriateness of the proposed location for a crosswalk. • Follow-up with the municipal road commissioner, planner, or engineer to seek their guidance and support. • For non-state roads, after gaining appropriate endorsements, work with the appropriate local official or employee to get the high-visibility crosswalk installed in the proper and safe location. • For state roads, work with the regional planning commission to get a formal study to determine if a crosswalk is warranted and safe.

	Advantages	Considerations	Resources	Actions
<p>Shared-use Paths</p> <p>Shared-use paths are separate facilities for non-motorized users such as bicyclists and pedestrians. Typically these facilities have their own right-of-way rather than sharing a right-of-way with a roadway.</p>	<ul style="list-style-type: none"> • Provides a safe place for non-motorized users that are typically separated from motor vehicles. • Shared-use paths appeal to users of all different skill levels, particularly those with basic or beginner skills. 	<ul style="list-style-type: none"> • Shared-use paths should typically be a minimum of ten feet wide and paved with asphalt. • Guidelines for the construction of shared-use paths can be found in the <i>Vermont Pedestrian and Bicycle Facility Planning and Design Manual</i>. • Further considerations are needed at intersections of the shared-use path and roadways to ensure safety for all users. 	<ul style="list-style-type: none"> • <i>Vermont Pedestrian and Bicycle Facility Planning and Design Manual</i> http://www.aot.state.vt.us/progdev/Sections/LTF%20Info/BikePedTOC.html 	<ul style="list-style-type: none"> • Work with the municipal planning office, road commissioner, administrator, or other municipal officials to gain their support for the proposed shared-use path. • Work with municipal partners to engage the regional planning commission with the project in terms of funding or other support for an initial alignment study to determine the appropriate shared-use path alignment and end points. This study will help the community understand where the shared-use path may be located as well as the issues that will need to be addressed, the types of permits that will be needed, and the potential cost for developing the shared-use path as proposed. This study, done with community input, will help the community decide if they want to proceed further with the project. • If the community wishes to continue to pursue a shared-use path, work with the municipal partner to understand potential funding sources and the various requirements involved in obtaining them.

Strategy	Advantages	Considerations	Resources	Actions
<p>Bicycle Routes/ Bicycle Pedestrian Warning Signs</p> <p>Bicycle route signs are officially designated routes for bicyclists through municipalities; they are typically used to focus bicycle travel onto roadways most suited for it.</p> <p>Bicycle and/or Pedestrian present warning signs (with an image of a bicycle and a pedestrian) provide a notice to motorists, that bicyclists or pedestrians are likely to be present.</p>	<ul style="list-style-type: none"> • Bicycle route signs assist bicyclists in determining the best route for their travel. • Warning signs raise safety conditions for bicyclists due to greater awareness by motorists of bicyclists on the road. 	<ul style="list-style-type: none"> • The number and location of bicycle routes and signs should be carefully studied by the community prior to implementation. Measures should be taken to reduce sign clutter. • Bicycle route signs and warning signs must meet the guidelines provided in the <i>Manual on Uniform Traffic Control Devices</i> (MUTCD). • In cases where there are on-road sections of bicycle connecting nearby trails, where a bike lane ends or a paved shoulder is reduced at a bridge, a “Share the Road Sign” may be appropriate. The “Share the Road” sign should be used to indicate a relatively brief special condition. 	<ul style="list-style-type: none"> • <i>Vermont Pedestrian and Bicycle Facility Planning and Design Manual</i> http://www.aot.state.vt.us/progdev/Sections/LTF%20Info/BikePedTOC.html • <i>Manual on Uniform Traffic Control Devices, latest edition (MUTCD)</i>, http://mutcd.fhwa.dot.gov/kno_2009r1r2.htm 	<ul style="list-style-type: none"> • Review guidelines provided in the latest edition of the MUTCD to make sure signs are compliant. • Work with the municipal planning office, road commissioner, administrator, or other municipal officials to gain their support for the creation of bicycle routes. • Follow the recommendations of the local official or employee as to the appropriate way to proceed, which could include: <ul style="list-style-type: none"> - Presenting the idea to the municipal legislators; - Implementing existing recommendations in a bicycle plan for the community; - Undertaking the development of a bicycle plan for the community to make sure that the specific recommendations still work within the context of the entire municipality; and - Working with the regional planning commission.

Strategy	Advantages	Considerations	Resources	Actions
<p>Sidewalks</p> <p>Sidewalks are paths separated from other roadway users along the sides of the roadway reserved for pedestrians.</p>	<ul style="list-style-type: none"> Sidewalks provide a relatively safe location for pedestrians along the sides of a roadway. They help to separate other roadway users and pedestrians within the same right-of-way. 	<ul style="list-style-type: none"> The availability of sufficient right-of-way to install sidewalks, including the travel way for vehicles and standards for sidewalk width, must be assessed. Sidewalks are most effective when they include a buffer from the paved surface of the road that is at least five feet wide. When sufficient right-of-way is not available for a buffer, a curb can provide some degree of separation between the roadway and the sidewalk. Other considerations include drainage, grading, existing signs, structures, and utilities. Sidewalks can be constructed of various materials including concrete, asphalt, or stone dust. 	<ul style="list-style-type: none"> <i>Vermont Pedestrian and Bicycle Facility Planning and Design Manual</i> http://www.aot.state.vt.us/progdev/Sections/LTF%20Info/BikePedTOC.html <i>Designing Walkable Urban Thoroughfares: A Context Sensitive Approach</i> (Institute of Transportation Engineers - Publication #RP 036A) http://www.ite.org/modules/scriptcontent/oders/ProductDetail.cfm?pc=RP-036A-E 	<ul style="list-style-type: none"> Review the State's <i>Pedestrian and Bicycle Facility Planning and Design Manual</i> to determine the appropriate dimensions based on roadway classification. Work with the municipal planning office, road commissioner, administrator, or other municipal officials to gain their support for the proposed sidewalk. Work with municipal partners to determine the appropriate sidewalk location based on available right-of-way. Review the sidewalk location to determine if any additional issues will need to be addressed, the types of permits that will be needed, and the potential cost for developing the proposed sidewalk. This review, done with community input, will help the community decide if they want to proceed further with the project. If the community wishes to continue work on the proposed sidewalk, work with the municipal partners to understand potential funding sources and the various requirements involved in obtaining them.

Strategy	Advantages	Considerations	Resources	Actions
<p>School Zones</p> <p>A school zone is an identified location on the roadway abutting a school which extends several hundred feet in each direction. It is identified with signs and pavements markings and sometimes includes a reduced speed zone.</p>	<ul style="list-style-type: none"> School zones increase motorists' awareness to look for students on or near the road and to drive with more caution. 	<ul style="list-style-type: none"> The creation of a school zone typically needs the approval of the municipality, either from the Selectboard, Board of Trustees, or City Council, unless they have passed on this approval to the road commissioner. School zones created on state roads need VTrans approval. Sight distances and other roadway conditions should inform the location of signs and pavement markings noting the limits of the school zone, within MUTCD guidelines. With few exceptions, school zones are located on the roadway adjacent to the school's main entrance. Must comply with State sign laws and laws for setting speed limits. 	<ul style="list-style-type: none"> <i>Manual on Uniform Traffic Control Devices, latest edition (MUTCD)</i>, http://mutcd.fhwa.dot.gov/kno_2009r1r2.htm Refer to <i>Vermont Statute 23, Section 1007</i> for guidance on assigning local speed limits http://www.leg.state.vt.us/statutes/fullsection.cfm?Title=23&Chapter=013&Section=01007 	<ul style="list-style-type: none"> Work with the municipal planning office, road commissioner, administrator, or other municipal officials to gain their support for the proposed school zone. Discuss the creation of a school zone with local Selectboard, Board of Trustees, or City Council to gain their support. For a school zone on a state road, work with municipal officials and/or the regional planning commission to contact VTrans to propose a school zone. Work with the municipal planning office, road commissioner, administrator, or other municipal officials to determine the specific limits of the school zone and the methods to be used to notify motorists of its presence, including signage, warning lights during arrival and dismissal times, pavement markings, or other methods. Work with municipal partners to determine the most appropriate way to provide funding for the notifications as appropriate and work with them to secure funding.

Strategy	Advantages	Considerations	Resources	Actions
<p>Road Signs</p> <p>Road signs provide information on road conditions, direction, advisories, or mandatory actions. Road signs may be regulatory, warning, or guide signs.</p>	<ul style="list-style-type: none"> Signs notify road users about road conditions, other users, regulations, or conditions that may not be immediately apparent. Many signs are not typically an expensive installation and can be approved and installed quickly. 	<ul style="list-style-type: none"> The number and type of existing signs can influence the effectiveness of new signs. Sign “clutter” can diminish the impact of new signs. Permanent signs can become part of the background and their perception by regular road users can diminish over time. Changing conditions, such as temporary flashing lights or periodic flags, can help to continually draw attention to a sign. Adding new signs to a local road typically needs the approval of the municipality, either from the Selectboard, Board of Trustees, or City Council, unless they have passed on this approval to the road commissioner. Signs added to state roads need VTrans approval. Any proposed signage must meet the guidelines provided in the <i>Manual on Uniform Traffic Control Devices</i> (MUTCD). 	<ul style="list-style-type: none"> <i>Vermont Pedestrian and Bicycle Facility Planning and Design Manual</i> http://www.aot.state.vt.us/progdev/Sections/LTF%20Info/BikePedTOC.html <i>Manual on Uniform Traffic Control Devices, latest edition (MUTCD)</i>, http://mutcd.fhwa.dot.gov/kno_2009r1r2.htm <i>Classification of Vermont Roads</i> http://maps.vermont.gov/imf/sites/ANR_NATRESViewer/jsp/ 	<ul style="list-style-type: none"> Work with the municipal planning office, road commissioner, administrator, or other municipal officials to gain their support for the placement of new signs. Discuss the placement of new signs with local Selectboard, Board of Trustee or City Council to gain their support. Work with the municipal planning office, road commissioner, administrator, or other municipal officials to determine the appropriate place for the signs while meeting guidelines provided in the MUTCD. If proposed on a state road, work with the municipal officials and the regional planning commission to contact VTrans to gain their approval and any necessary permitting for the proposed signs.

Strategy	E's	Advantages	Considerations	Resources
<p>Crossing Guard Appreciation Day</p> <p>Crossing guards help our children cross the road safely in the mornings and afternoons, in all weather conditions. Remind them that you appreciate their service and dedication. Students can create thank you cards that they deliver themselves during their walks home, or teachers and administrators can honor them formally during a school assembly.</p>	Encouragement	<ul style="list-style-type: none"> • Maintains a positive relationship between the crossing guards and the school/community. • Can inspire crossing guards to continue to be reliable, safety figures. • Creates an opportunity to remind students why it is important to practice safe walking skills. 	<ul style="list-style-type: none"> • Requires coordination between the crossing guards, school administrators and school instructors. • May require materials to create the thank-you cards. • Is most effective with newsletter and in-school announcements. • Relatively inexpensive strategy 	<ul style="list-style-type: none"> • Active Transportation Alliance webpage for Crossing Guard Appreciation Day http://www.activetrans.org/crossingguard

APPENDIX H SNOW REMOVAL TOOLKIT

Prompt and effective snow, ice, and slush clearance on sidewalks along Safe Routes to School is critical for maintaining safe biking and walking conditions. Snow removal of bicycle and pedestrian accommodations that are designated school routes should be planned for. According to the VT Pedestrian and Bicycle Facility Design Manual Section 10.5.1, local policies should treat the clearance of snow from walkways as equally important as clearance of snow from roadways in order to maintain year-round accessibility.

Guidelines

The responsibility of all snow and ice clearance generally falls upon the property owner of the facility. A municipality's highway department is typically responsible for snow and ice removal on roads and sidewalks on public property. Private roads and sidewalks on private property are the responsibility of the property owner.

A clear, unobstructed pathway at a minimum of 48" wide should be provided on all sidewalks, curb ramps, and through crosswalks. Snow, slush, and ice should be cleared from sidewalks, to provide a clear path of 48", ideally, within 12 hours after a storm event. Designated portions of the roadway for bicycle use should also be cleared since, even in winter, some experienced bicyclists commute by bicycle.

Pedestrian walkways, curb ramps, and crosswalks or bicycle facilities should not be used for areas of snow storage. Additional consideration should also be taken to maintain adequate sight distances at all intersections and to prevent snow storage from building up too close to walkways.

Paved shared-use paths that are designated routes to school should be kept clear of snow so that students can walk to school year-round. Snow clearance is not a consideration for natural surface paths that are used for winter activities which also allow students to cross-country ski or snow-shoe to school.

Recommendations

The following six basic recommendations can assist a community in developing a strategy to improve sidewalk snow and ice clearance.

1. Create a norm of snow and ice clearance through social awareness campaigns.
2. Identify a municipal point person for snow removal.
3. Determine priority sidewalks and paths for snow clearance.
4. Improve monitoring and enforcement.
5. Design sidewalks for easier snow removal.

6. Train municipal and private snow plowing personnel on the guidelines for pedestrian and bicycle facility clearance (i.e., 48" clear path and priority routes.)

Monitoring and Enforcement

There are three primary ways in which the clearance of sidewalks can be monitored and enforced;

1. Identify who monitors and enforces.
2. Define penalties and how they will be enforced.
3. Implement a social awareness campaign.